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INTERNATIONAL HARVESTER



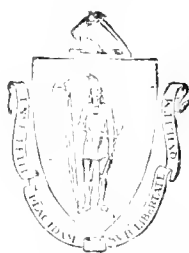
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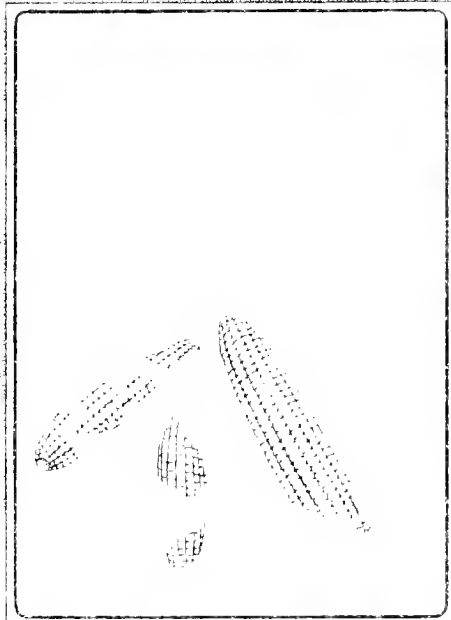
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INTERNATIONAL HARVESTER COMPANY OF AMERICA
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Four No. 1 International Cultivators in One Field. Their Work Is Highly Satisfactory

The Corn Crop and International Cultivators

The cultivator has much to do with favorable growing conditions for the corn. Thorough stirring of the soil around the corn roots and between the rows is what makes the corn grow. Moisture is thereby conserved, weeds are kept out, and the corn receives the full benefit of both rain and sun.

Corn comes on rapidly when once above the ground—so do the weeds. It is therefore essential in a cultivator that it stirs the soil thoroughly to the right depth and plows out the weeds. It must also have staying qualities. It must be easy to handle and adjust so that cultivator, man and team can keep going steadily throughout the day, and day after day, without loss of time.

Where a large number of acres are planted with corn, the rapidity with which one field can be finished, and the cultivating in another one started, often means a partial failure or a good crop yield.

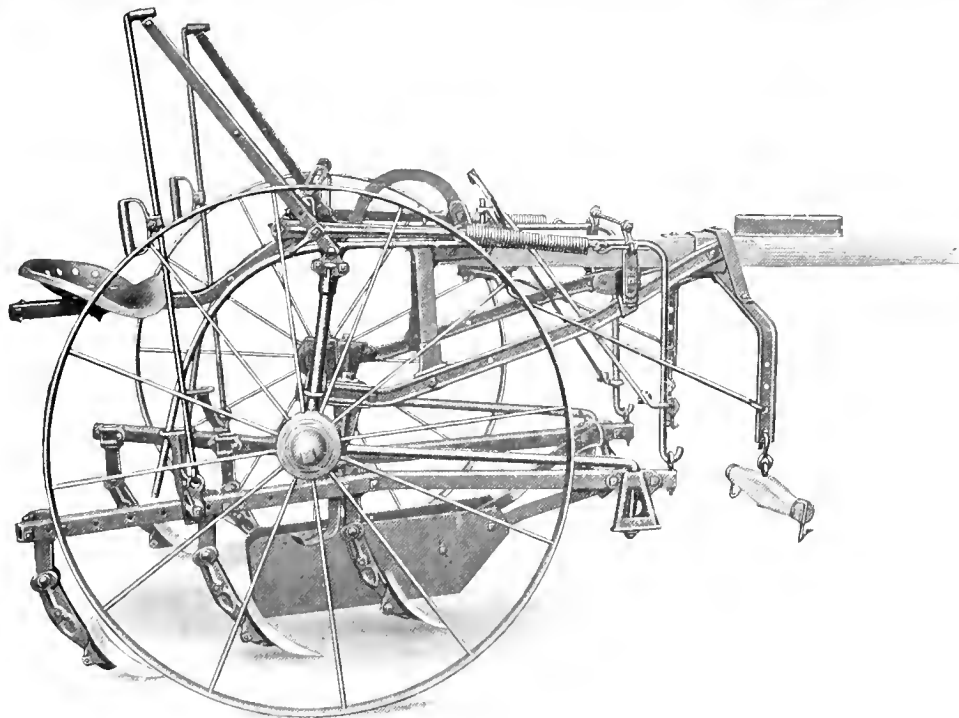
You will find that International cultivators stir the soil right. Various adjustments for plow depth and a variety of gang equipments provide the right outfit for the many cultivating conditions to be met in the field. International cultivators are constructed with careful regard for the work ahead of them as the following pages of this catalog will show.

No. 1 International Pivot Pole Cultivators

The International pivot pole cultivators are favorites with the corn belt farmers, because they are constructed free from cumbersome parts; they are easy to handle; they are strong and durable; their service in the field has proved their worth.

Simple Construction The axle forms the main part of the frame and is reinforced and supported by steel bar braces, extending to the tongue. The high arched frame leaves a clear, open space for the corn row. Tall corn may be cultivated without breaking it over.

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**No. 1 Pivot Pole Cultivator. The Gangs Are Suspended from the Bail Rods and Mast Rods.
The Gang Equipment Is B-11, 6-Shovel, Pin Break, Round Shank**

Two Types These cultivators are manufactured in two types straddle seat and hammock seat. With the straddle seat, the cultivator may be operated as a pivot pole or a rigid pole cultivator. With the hammock seat, the cultivator is operated as a rigid pole cultivator. The rigid pole is secured by inserting a steel pin at the end of the pole. The frame of the cultivator is in no way altered when changing from one type to the other.

Gangs The gang beams are one-piece steel tubes. The shovel standards are made from steel, and the shanks from malleable iron. The gangs are set well forward and operate in line with the tread of the wheels. An even depth of cultivation is secured, and especially so when working on uneven ground or crossing dead furrows. This feature also makes it easy for the driver to watch the corn row, because his work is all in front of him.

Parallel Movement of Gangs This means that the gangs are always parallel, whether spread apart or working close together. When the gangs are shifted, the front ends move exactly the same distance as the rear, regardless of whether they are working next to the corn row or close to the wheels, or whether they are moved apart or together. On account of this parallel motion, the shovels always cultivate to their full width, that is, the width of the strip of soil from the front shovel to the rear shovel that is cultivated is always the same.

Bail Rods Insure Parallel Gang Movement The bail rods as shown in the cut are the rods to which the front end of the gang beams are hung. They run vertically up to and through an adjustable bracket attached to the steel frame bars and then horizontally back over the frame and axle and down through loops, which are attached to the gang beams

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near to the middle shovel standards. With this construction, both the front and rear ends of the gang beams are controlled by the bail rods; therefore, when the gang beams are shifted the whole gang must move—the front end an equal distance with the rear end. The bail rod control of the parallel gang movement is an exclusive feature on International cultivators.

The Rear End of Gangs Suspended by Mast Rods In the cut it may be seen that the gangs at the rear are suspended by long rods which are called mast rods. The V-shaped supports for the rods are known as masts. It is thus seen that the gangs are hung at both rear and front ends. The mast rods pivot at the top where they are attached to the masts, allowing perfect freedom for shifting the gangs.

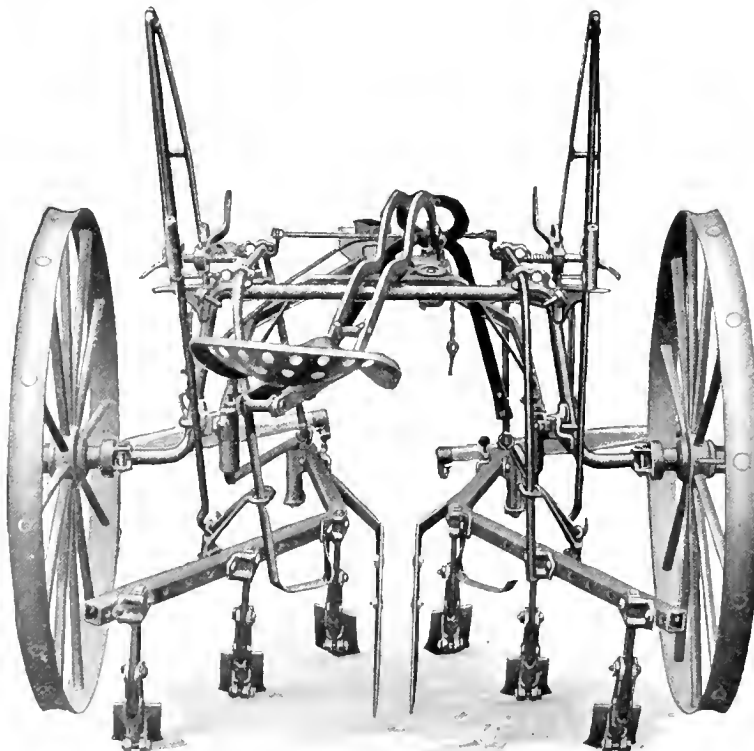
The steel masts also provide the means by which the shovels are thrown into and raised out of the ground. At the base of the V-shaped masts are levers attached to cushion springs which regulate the plow depth. The levers can be adjusted instantly and when the desired depth is secured can be set. The mast rods then act simply as a pivot on which the gangs swing, and as a means for raising and lowering the gangs.

Gangs Are Pushed by Crank Rods The crank rods which push the gangs run directly from the axle to the V-shaped boxes at the front end of the gangs. Tractive power is thus transmitted directly from the axle to the gangs. There is no lost power or any down pulling upon the horses' necks. Further ore, the crank rods being lower than the axle, the

tractive power is downward and forces the shovels into the ground. These rods also accentuate the parallel gang movement. No matter how far the gangs are moved to either side, the crank rods keep them in proper position for good work.

Cushion Springs Carry the Weight of the Gangs and make the act of raising and lowering the gangs a very easy one. The handles on the mast rods are convenient to the driver and a slight pull to start the gangs up or down is all that is required. The springs do the actual work. When the gangs are raised the springs have contracted and hold the masts firmly, virtually locking them and preventing their dropping.

The Jockey Arch is used when the operator wishes to



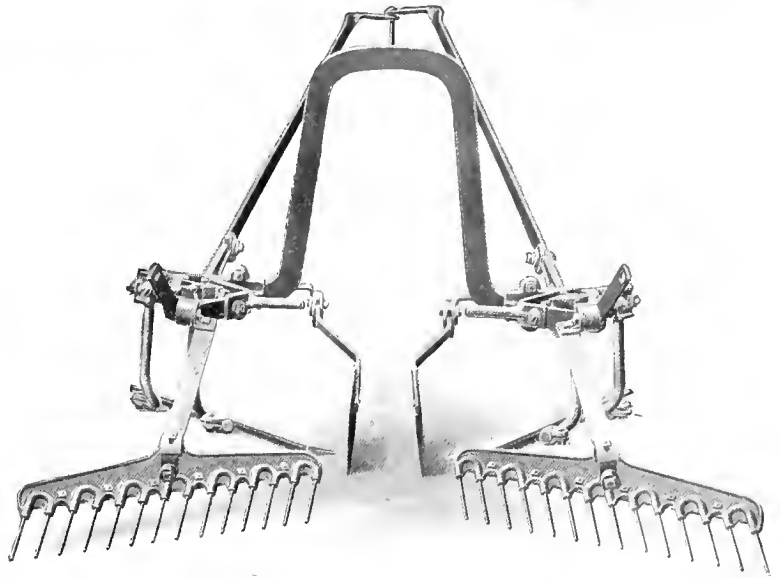
No. 1 Cultivator, Showing How Gangs Are Guided by the Pivot Pole. Gang Equipment Consists of B-11, 6-Shovel, Pin Break, Round Shank

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have the gangs move together, that is to overcome the independent action of the gangs. It is furnished regularly with the cultivators and is adjustable to several widths.

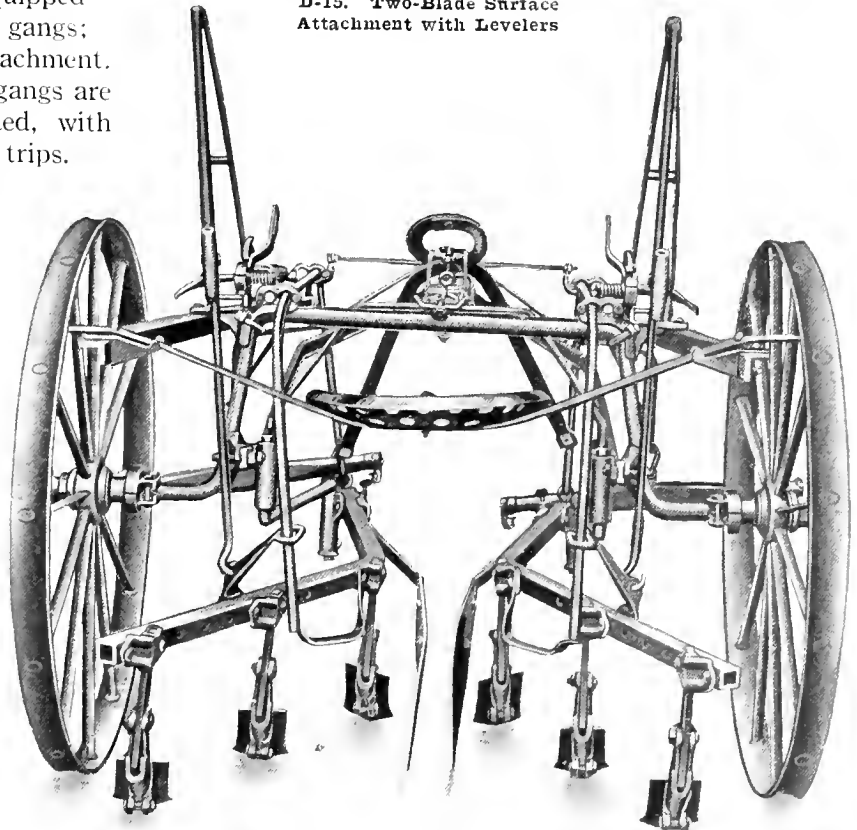
Wheels International cultivator wheels have large oval spokes that are cast into the hub and riveted into and upset within the tires. The bearings are long and dust proof. The end of the hub is covered with a grease cup. The tires are concave.

Types of Gangs This cultivator can be equipped with 4, 6 and 8 shovel gangs; also with a surface attachment. The shanks on these gangs are either round or slotted, with pin breaks or spring trips.

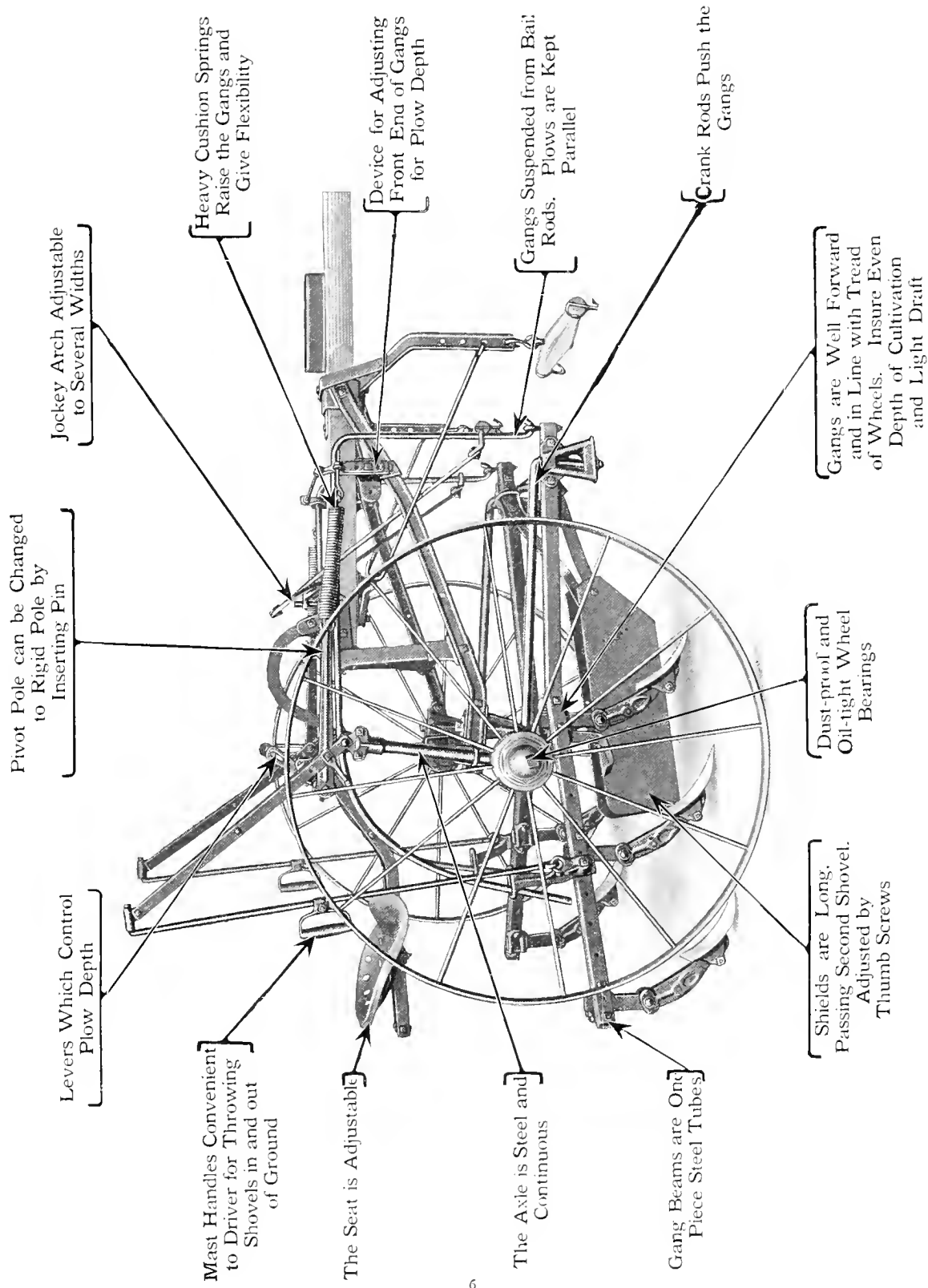


D-15. Two-Blade Surface Attachment with Levelers

No. 11 International Cultivator is the same as the No. 1 except that it is equipped with the surface attachment



No. 11 Cultivator Equipped with Hammock Seat. Gang Equipment Is the Same as in Cuts of No. 1 Pivot Pole Cultivator



Pivot Pole can be Changed to Rigid Pole by Inserting Pin

Jockey Arch Adjustable to Several Widths

Heavy Cushion Springs Raise the Gangs and Give Flexibility

Device for Adjusting Front End of Gangs for Plow Depth

Gangs Suspended from Bail. Rods. Plows are Kept Parallel

Crank Rods Push the Gangs

Gangs are Well Forward and in Line with Tread of Wheels. Insure Even Depth of Cultivation and Light Draft

Dust-proof and Oil-tight Wheel Bearings

Shields are Long. Passing Second Shovel. Adjusted by Thumb Screws

Levers Which Control Plow Depth

Mast Handles Convenient to Driver for Throwing Shovels in and out of Ground

The Seat is Adjustable

The Axle is Steel and Continuous

Gang Beams are One Piece Steel Tubes

Gang Equipment for No. 1 Cultivator

Key for Gang Equipment

"A" before the number stands for four-shovel gangs.

"B" before the number stands for six-shovel gangs.

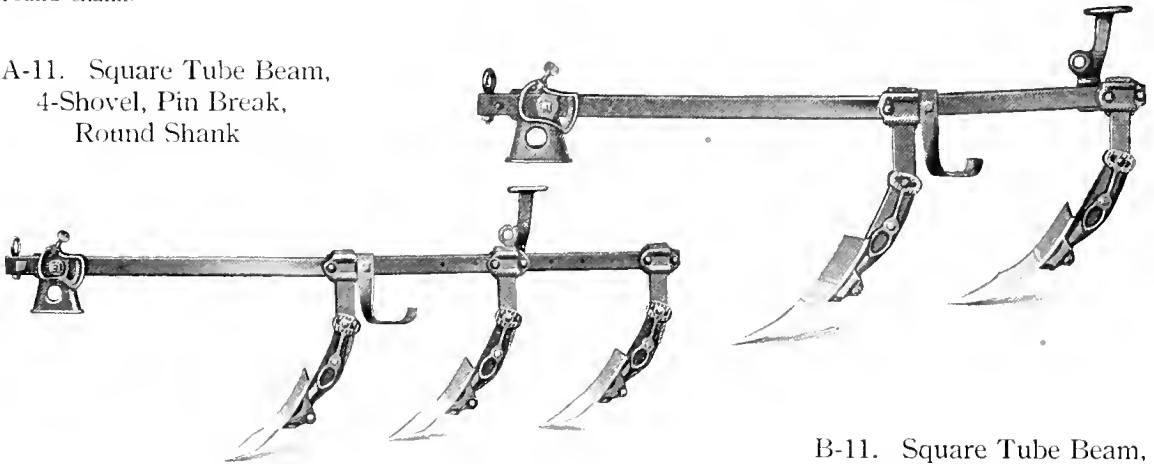
"C" before the number stands for eight-shovel gangs.

"D" before the number stands for two-shovel gangs.

The first figure "1" indicates that the equipment is for the No. 1 cultivator.

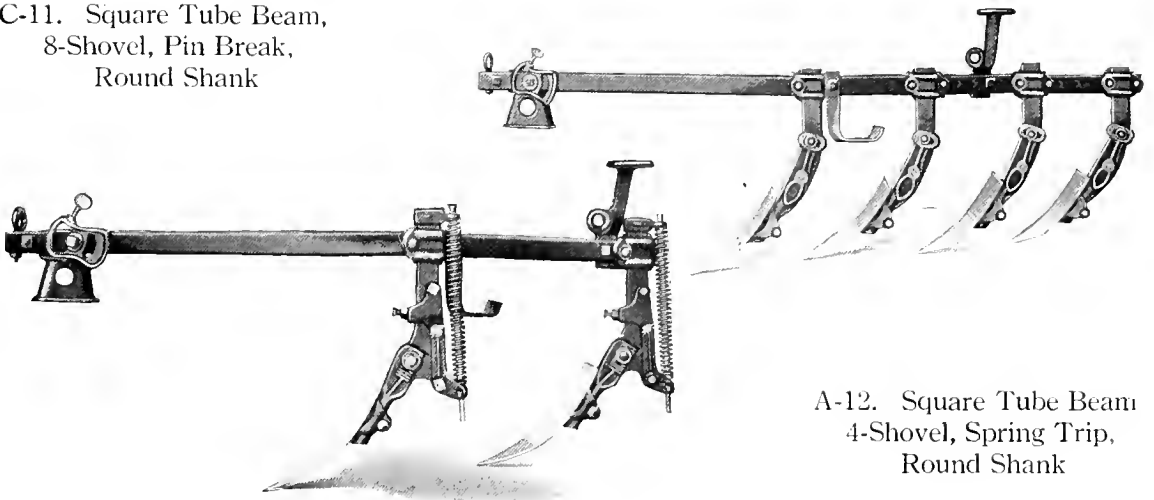
The second number in each instance indicates the kind of equipment, for example, A-11 indicates 4-shovel gang; first figure 1, that the gang is for the No. 1 cultivator; second figure 1, that the equipment consists of pin break, round shank.

A-11. Square Tube Beam,
4-Shovel, Pin Break,
Round Shank



B-11. Square Tube Beam,
6-Shovel, Pin Break,
Round Shank

C-11. Square Tube Beam,
8-Shovel, Pin Break,
Round Shank

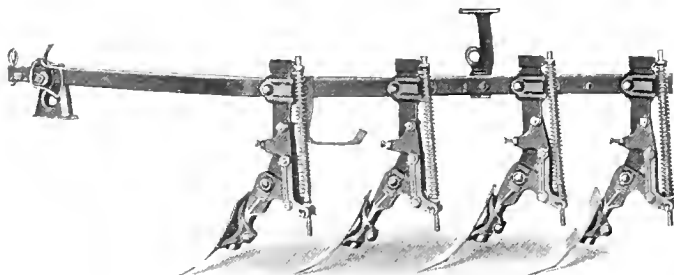
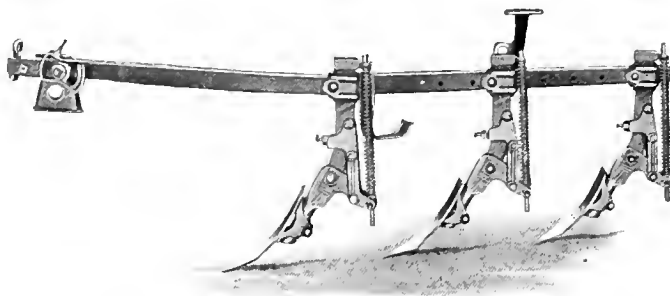


A-12. Square Tube Beam,
4-Shovel, Spring Trip,
Round Shank

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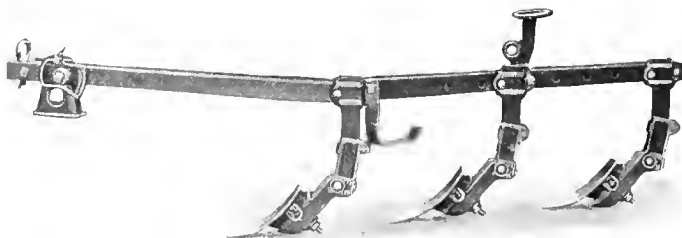
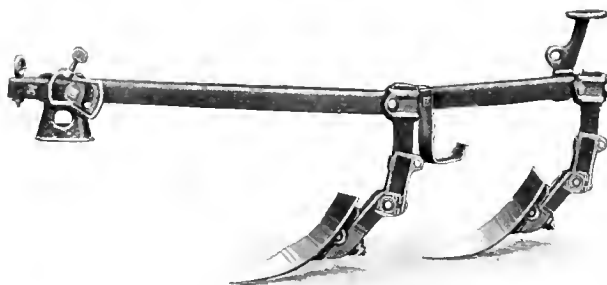
Gang Equipment for No. 1 Cultivator

B-12. Square Tube Beam,
6-Shovel, Spring Trip,
Round Shank



C-12. Square Tube Beam,
8-Shovel, Spring Trip,
Round Shank

A-13. Square Tube Beam,
4-Shovel, Pin Break, Heavy
Slotted Shank

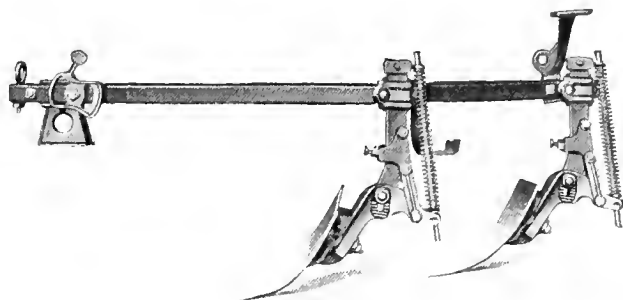
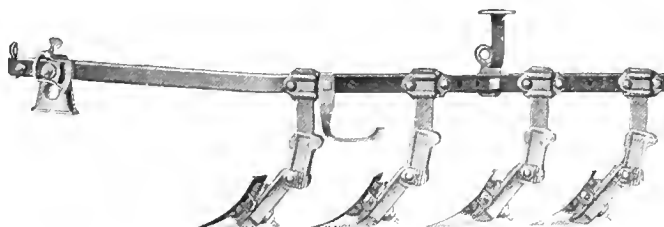


B-13. Square Tube Beam,
6-Shovel, Pin Break, Heavy
Slotted Shank

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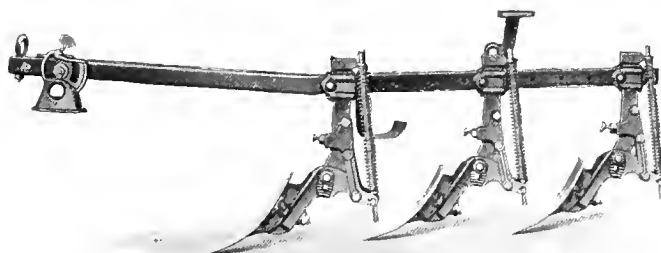
Gang Equipment for No. 1 Cultivator

C-13. Square Tube Beam,
8-Shovel, Pin Break, Heavy
Slotted Shank

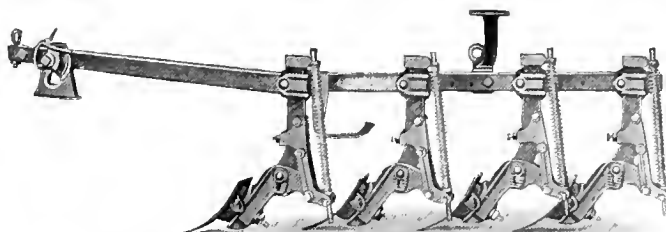


A-14. Square Tube Beam,
4-Shovel, Spring Trip, Heavy
Slotted Shank

B-14. Square Tube Beam,
6-Shovel, Spring Trip, Heavy
Slotted Shank



C-14. Square Tube Beam,
8-Shovel, Spring Trip, Heavy
Slotted Shank

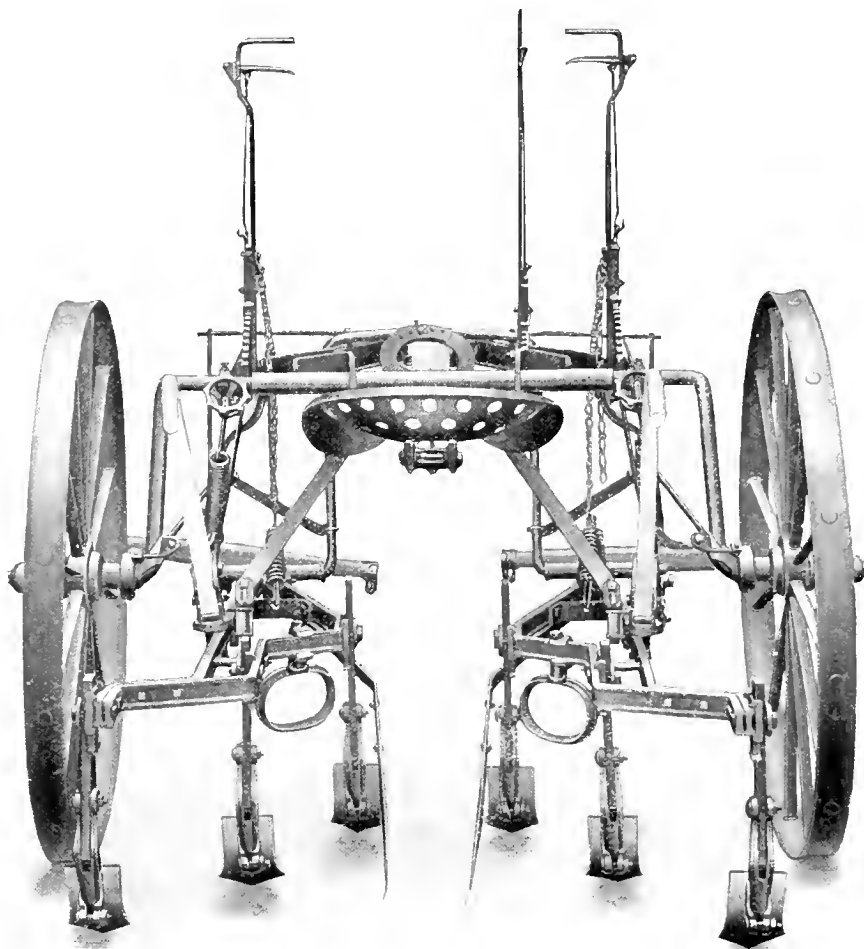


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No. 2 International Combination Cultivator With Lever Control

The combined riding and walking cultivator is one with which corn can be cultivated to the best possible advantage. It is strong; it is very convenient; the parts are few; it allows an abundance of clearance for a view of the corn row, and for the cultivation of tall corn. The soil can be cultivated very shallow, or as deep as desired, at the operator's pleasure. Plow depth changes can be made quickly with the levers.

Channel Steel Frame The frame is all steel. The main sills are channel steel, 2½ inches wide. These sills, together with the axle, carry the weight and strain of the cultivator. There is abundant strength for heavy work and for long service.



No. 2 Combination Cultivator with Lever Control. The Arch is High and Wide. The Cultivator Is Equipped with B-21 Combination Gang, 6-Shovel, Pin Break, Round Shank

Balanced Frame A convenient feature of the International combination cultivator is the balanced frame. The action is controlled by a lever. The lever operates two cranks on the front part of the frame which are connected to rods running directly to the axles. The wheels thus are moved forward or backward with the raising or lowering of the lever. The lever is forward and to the right hand side of the cultivator, out of the way while cultivating, but within easy reach when wanted.

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Telescoping Axle The telescoping axle provides for various widths of tread from 42 to 54 inches. The crank portions of the axle, or the wheel portions, telescope into the arch, which is a heavy steel pipe. These portions of the axle are solid steel and are held into place by large set screws, one at either side.

Gangs The cultivator has a large assortment of gangs and gang equipment. Four, 6, or 8 shovels may be used. With the exception of the special 4-shovel gang, the gang beams are constructed from I-beam bar steel.

Gang Combinations With the gang which is described above, six combinations are possible. First, the 3-shovel diagonal combination; second, the 4-shovel diagonal combination; and third, the 4-shovel eagle claw, or zigzag combination. These combinations are illustrated in the cut on page 12, and also in the cuts showing the gang equipment. In addition to the three combinations mentioned above, this gang also has three 2-shovel combinations with sweeps and scrapers, as shown in the table on page 13.

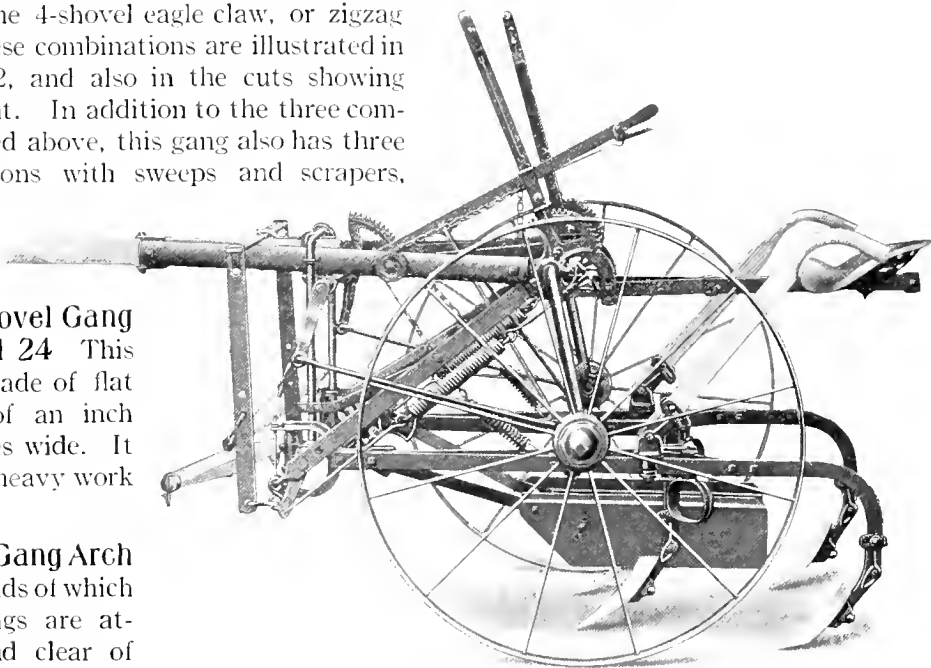
Special 4-Shovel Gang A-21, 22, 23 and 24 This special gang is made of flat steel beams $\frac{9}{16}$ of an inch thick by $1\frac{1}{2}$ inches wide. It is constructed for heavy work with large shovels.

The Front or Gang Arch to the horizontal ends of which the gang couplings are attached is wide and clear of bolts or rod ends that would catch the corn blades and tear them off or break the stalks over.

The Gang Couplings have adjustable cone bearings. Any looseness or play in the coupling can be quickly taken up. The couplings are also so constructed that they may be adjusted up or down for plow depth, or sideways for a wider or narrower spread of the gangs.

Plow Depth is controlled by two levers. The springs are connected with the raising and lowering chains. The springs allow additional plow depth by pressing down on the handles or foot stirrups. Trash or grass can be cleaned from the shovel points in this way. The additional plow depth is also convenient for tearing out large weeds.

The Two Front Shovel Standards on all the gangs are made extra long for use in listed corn.



No. 2 Combination Cultivator Equipped with A-21 Special 4-Shovel Gang, Pin Break, Round Shank

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The Gang Sustaining Springs are located directly on the axle. They carry the weight of the gangs and make the shifting and handling of the gangs an easy task. Being attached directly to the axle, the weight and strain is carried directly back to the axle. The tension of the springs is controlled by large hand screws, which are within easy reach of the operator.

Adjustable Seat The seat can be moved backward or forward on the seat bars to suit the convenience of the operator. When the cultivator is used for walking, the seat can be folded forward on the frame. This is also a convenience in adjusting the shovels—the seat is thrown forward out of the way.

Adjustable Handles The handles can be adjusted to any position desired on the gangs. They can be moved forward so that when the operator is riding he can use the handles to assist in guiding the gangs. When wanted for walking, they can be quickly moved back and turned to the side so that the operator will clear the corn row in walking.

Quick Adjusting Shields are used. The adjustment is controlled by a thumb screw. The shields are made extra long to prevent the second shovel on side hills from covering the corn.

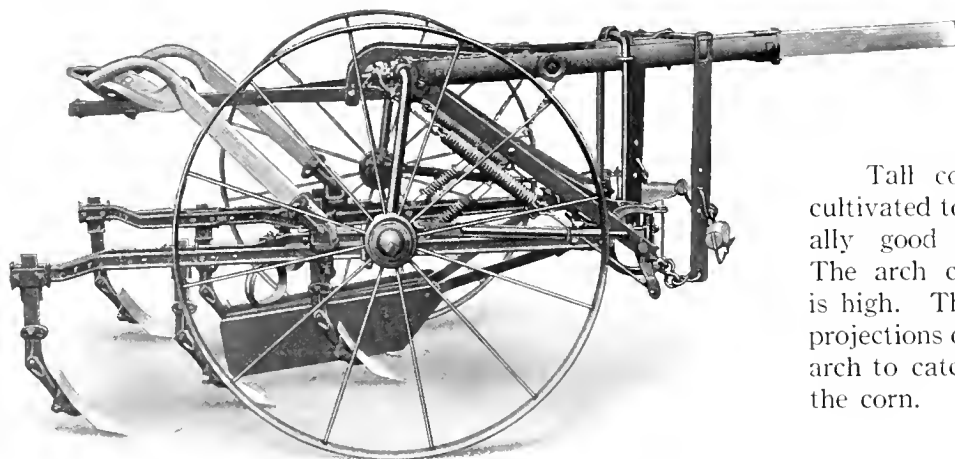
Wheels All steel wheels are used on this cultivator. The spokes are large and oval. They are cast into the hub and riveted into and upset in the tires. The boxes are extra long and dust proof, with grease cups on the ends of the hubs. The tires are concave.

A Standard Drop Evener is used, which effectively equalizes the draft. The lower end of the eveners is connected directly to the gang coupling head.

Gang Equipment—There are 16 gang combinations for use on these cultivators. The various equipment consists of round or slotted shanks, and with pin breaks or spring trips. The 8-shovel gangs are of two types—the diagonal, 4 shovels to the gang, or the zigzag, 4 shovels to the gang.

No. 22 International Combination Cultivator—Leverless

The leverless cultivator is liked because of its few parts. It is open; a clear view of the row ahead can be had. The operator has an exceptionally open view of the corn row immediately in front of the shovels.



Tall corn can be cultivated to exceptionally good advantage. The arch construction is high. There are no projections on the front arch to catch and tear the corn.

No. 22 Combination Cultivator—Leverless. It Is Equipped with B-21 Combination Gang, 6-Shovel, Pin Break, Round Shank

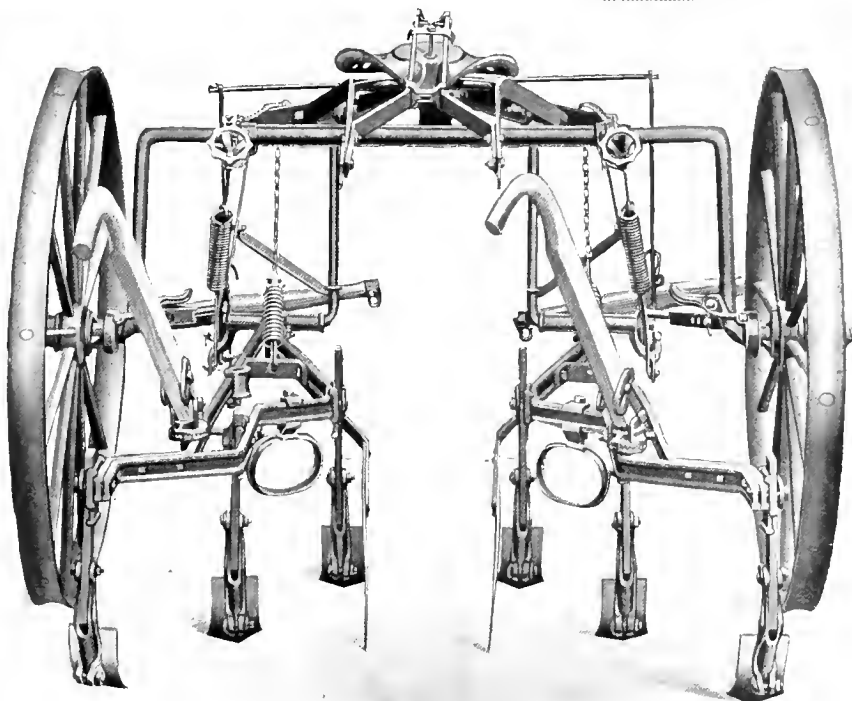
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This cultivator has the same frame, the same gang equipment, and the same wheels as the combination cultivator with levers.

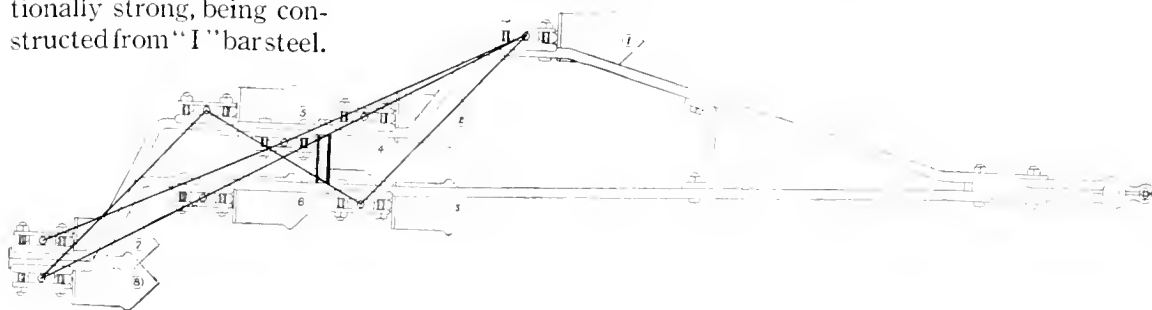
Balanced Frame

The combination leverless has all the advantages of the best cultivators manufactured. The frame is balanced, the control being by steel straps and rods, connected directly to the axles and to the diagonal frame bars near the gang heads.

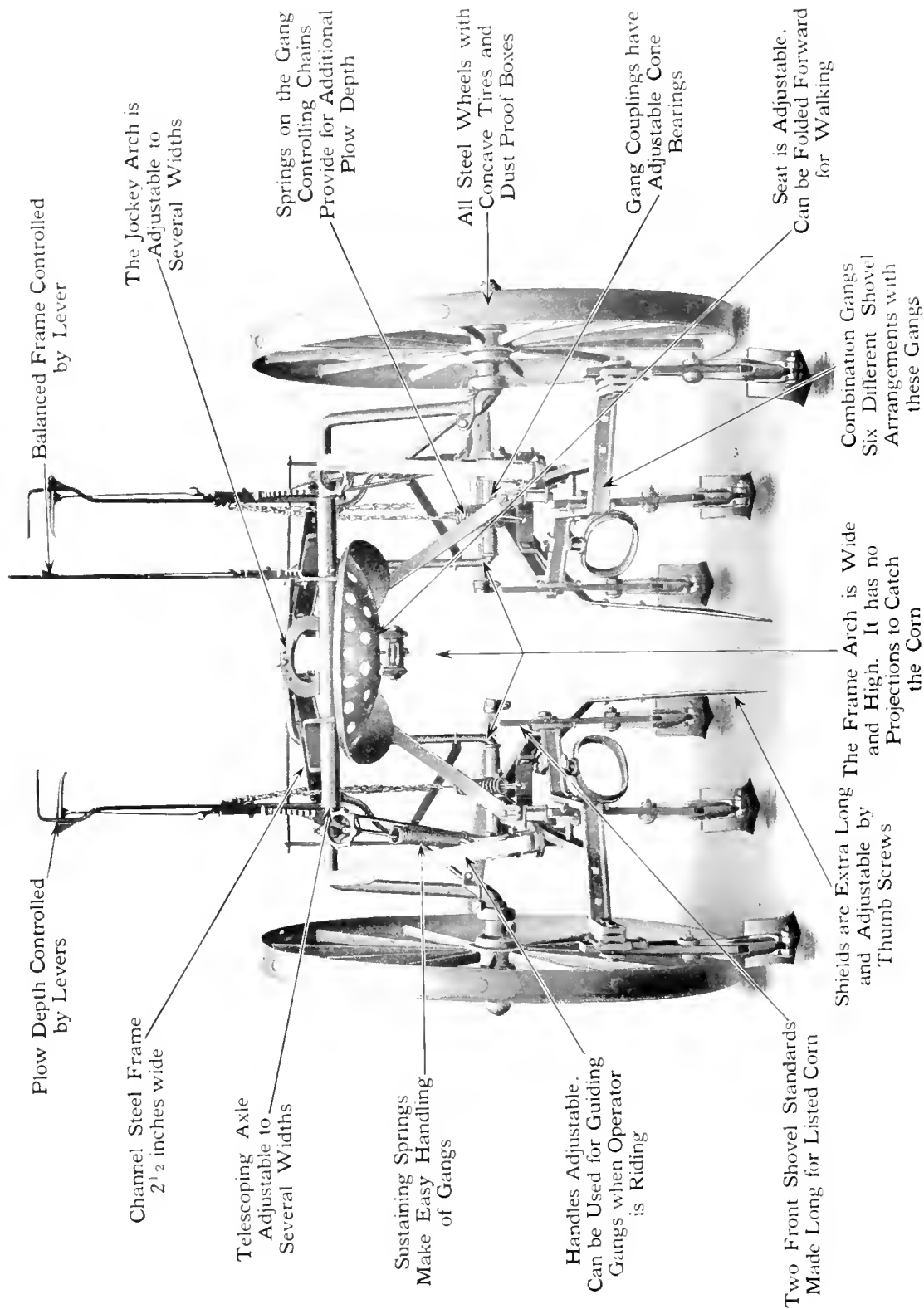
Six Different Combinations can be made with the combination gang for the No. 2 and No. 22 cultivators. These combinations are given in the table below, and are shown in the cut by the numbers on the shovels and by the lines drawn from the standards. This gang is exceptionally strong, being constructed from "I" bar steel.



No. 22. Combination Cultivator—Leverless—as It Looks When Adjusted for Walking. The Seat Is Thrown Forward, the Handles Are Moved Back. This Cut Also Gives a Good View of the B-21 Combination Gang with Pin Break and Round Shank
Note the Great Width and Height of Arch



BEAM COMBINATIONS	SPACING	SHOVELS	SIZE OF SHOVELS
4-Shovel Eagle Claw or Zigzag	5" x 9"	1-3-5-8	2 $\frac{3}{4}$ " x 7"
4-Shovel Diagonal Gang	5" x 9"	1-2-6-8	2 $\frac{3}{4}$ " x 7"
3-Shovel Diagonal	6 $\frac{3}{8}$ " x 13 $\frac{1}{2}$ "	1-4-7	3 $\frac{1}{2}$ " x 8"
2-Shovels	10" x 18"	1-6	5" x 9 $\frac{1}{2}$ "
2-Shovels	12 $\frac{3}{4}$ " x 27"	1-7	Sweeps or Scrapers
2-Shovels	15" x 27"	1-8	Sweeps or Scrapers



Gang Equipment for No. 2 and No. 22 Cultivators

Key for Gang Equipment

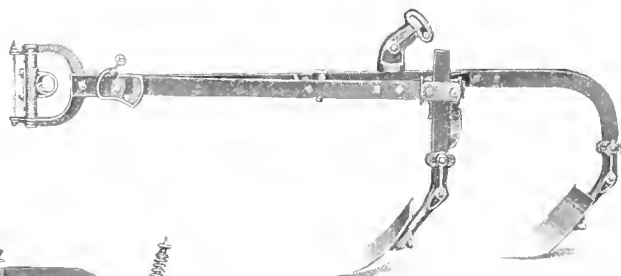
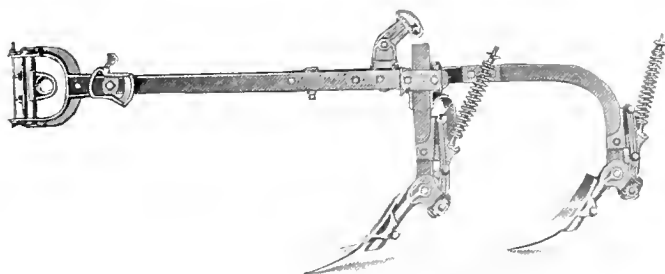
"A" before the number stands for four-shovel gangs.

"B" before the number stands for six-shovel gangs.

"C" before the number stands for eight-shovel gangs.

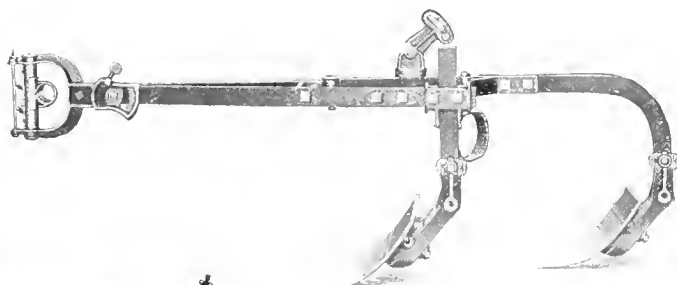
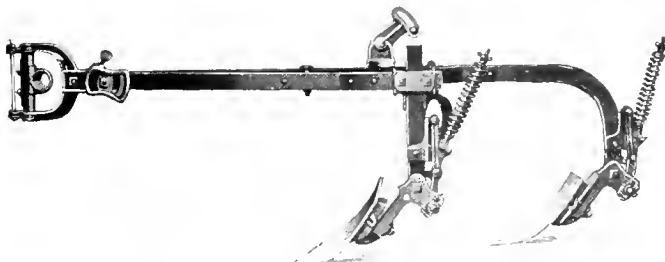
The first figure "2" indicates the equipment is for the No. 2 and No. 22 cultivators. The second number in each instance indicates the kind of equipment, for instance, in A-21 the second figure indicates the equipment is round shank, pin break.

A-21. Steel Beam, 4-Shovel,
Pin Break, Round Shank



A-22. Steel Beam, 4-Shovel,
Spring Trip, Round Shank

A-23. Steel Beam, 4-Shovel, Pin
Break, Heavy Slotted Shank

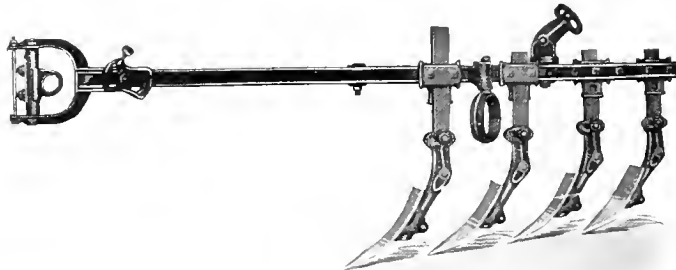
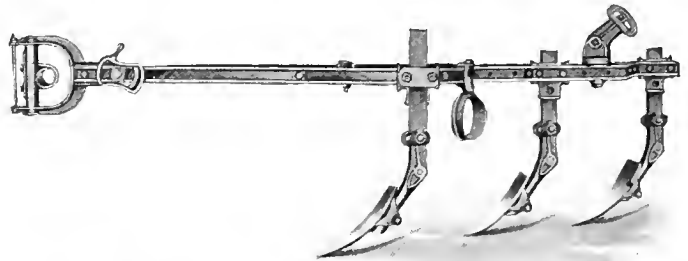


A-21. Steel Beam, 4-Shovel,
Spring Trip, Heavy Slotted Shank

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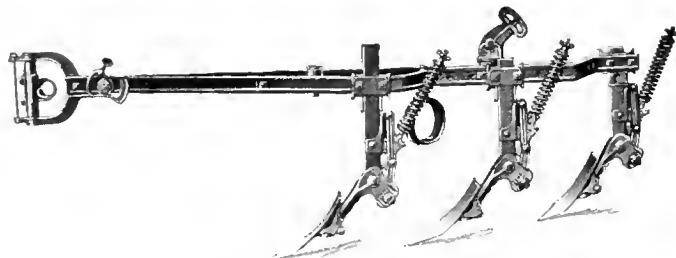
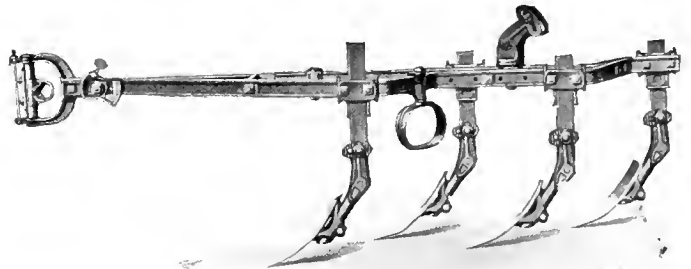
Gang Equipment for No. 2 and No. 22 Cultivators

B-21. Steel Beam, 6-Shovel,
Pin Break, Round Shank



C-21. Diagonal-Steel Beam,
8-Shovel, Pin Break,
Round Shank

C-21. Zigzag-Steel Beam,
8-Shovel, Pin Break,
Round Shank

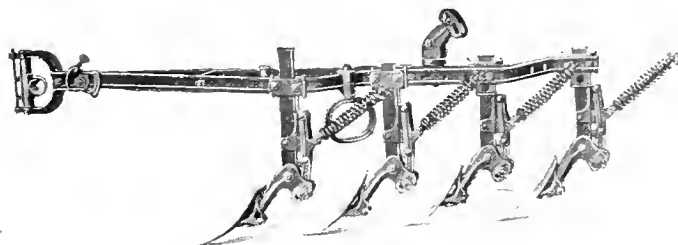
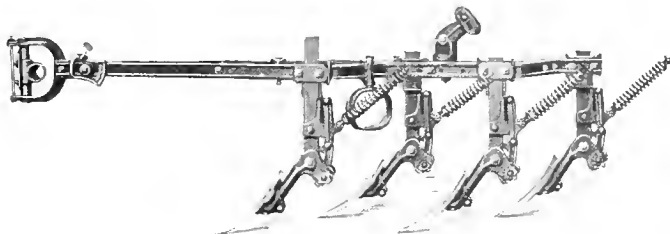


B-22. Steel Beam, 6-Shovel,
Spring Trip, Round Shank

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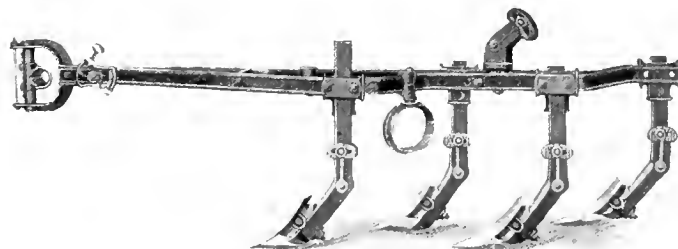
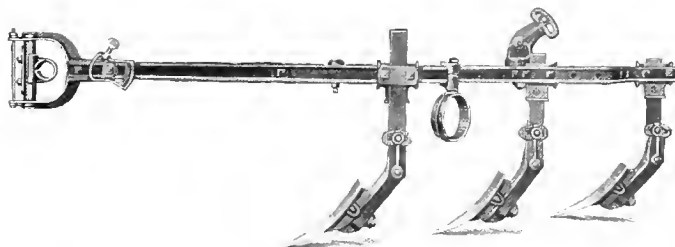
Gang Equipment for No. 2 and No. 22 Cultivators

C-22. Diagonal-Steel Beam,
8-Shovel, Spring Trip,
Round Shank



C-22. Zigzag Steel Beam,
8-Shovel, Spring Trip,
Round Shank

B-23. Steel Beam, 6-Shovel, Pin
Break, Heavy Slotted Shank

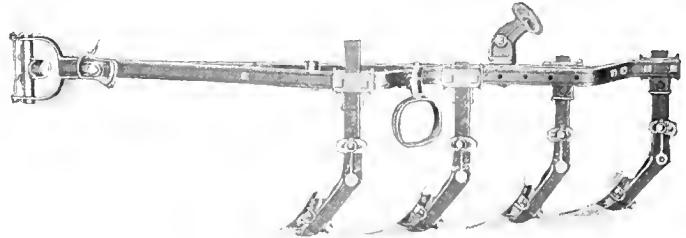


C-23. Diagonal-Steel Beam,
8-Shovel, Pin Break, Heavy
Slotted Shank

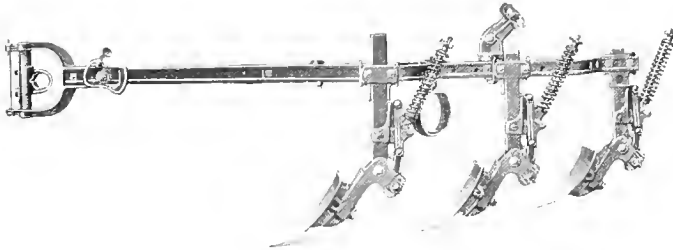
INTERNATIONAL CULTIVATORS

Gang Equipment for No. 2 and No. 22 Cultivators

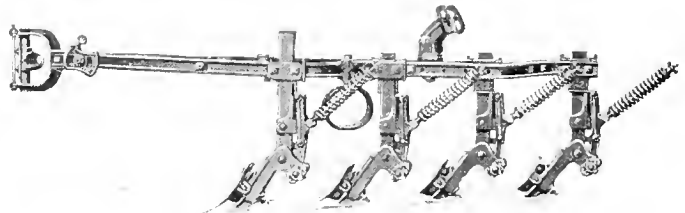
C-23. Zigzag-Steel Beam,
8-Shovel, Pin Break, Heavy
Slotted Shank



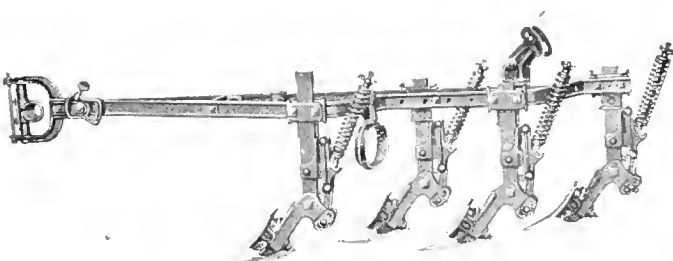
B-24. Steel Beam, 6-Shovel,
Spring Trip, Heavy Slotted Shank



C-24. Diagonal-Steel Beam,
8-Shovel, Spring Trip, Heavy
Slotted Shank



C-24. Zigzag-Steel Beam,
8-Shovel, Spring Trip, Heavy
Slotted Shank





No. 3 International Walking Cultivators

The walking cultivator is practically all steel. It is simple in construction — a cultivator of few parts. The arched frame is high and wide.

Balanced Frame

When the gangs are hung up they are balanced by the tongue. The tongue retains its correct horizontal position. The balanced frame feature is obtained by attaching the gangs to an arch forward of the axle. The point of support is therefore in front of the axle. When the gangs are hung up, the point of support is far enough off of center to keep the cultivator nicely balanced.

Gang Beams

The gang beams are made of one-piece steel tubing. The handles are long enough so that the corn row and the rear shovels do not hinder the operator's walking freely. They are adjustable for height or for side movement.

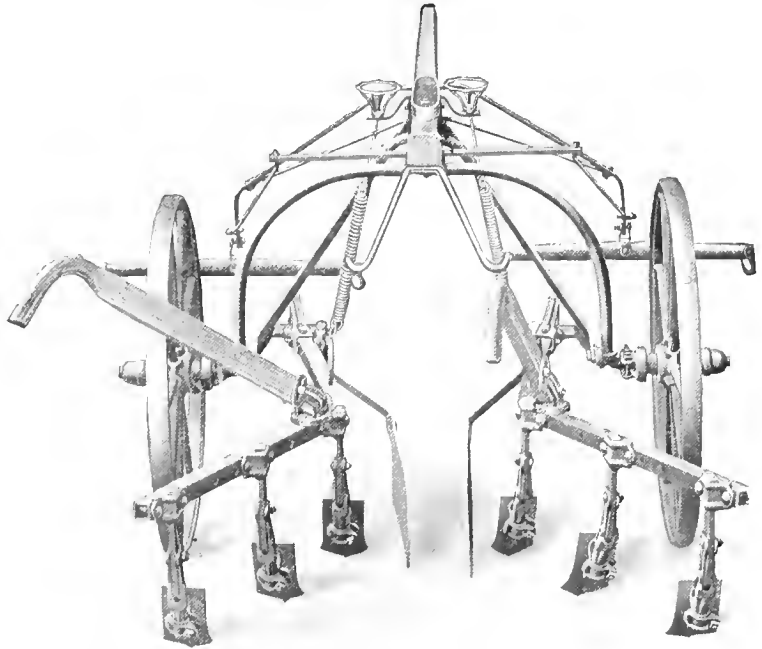
Gangs Placed Well Forward The gangs are attached to the front arch forward on the tongue from the axle. This brings the shovels closely in line with the tread of the wheels, making possible even cultivation. Light draft is also insured, since the load is nearer to the horses.

Adjustable Cone Bearings are used in the gang couplings. They are durable, simple, strong and easily adjusted. They can be moved both up and down for plow depth and sideways for a wide or narrow spread of the gangs.

Cushion Springs assist in raising the gangs. The springs are fastened by an arch over the tongue and then directly to the gang heads. The weight of the gangs is carried to the tongue and frame.

The Wheels are steel with large oval spokes. These are cast into the hub and riveted into and upset within the tires. The tires are oval. The wheel boxes are dust proof, with grease cups on the end of the hubs.

The Gang Equipment consists of 4, 6 and 8 shovel gangs. They may be fitted with round or slotted shanks, with pin breaks or spring trips. The cuts of the various gang equipments follow on the succeeding pages.



No. 3 International Walking Cultivator. It Is Self-Balancing, the Weight Being Carried Forward of the Axle. The Gang Equipment Is B-31, 6-Shovel, Pin Break, Round Shank

Gang Equipment for No. 3 Walking Cultivator

Key for Gang Equipment

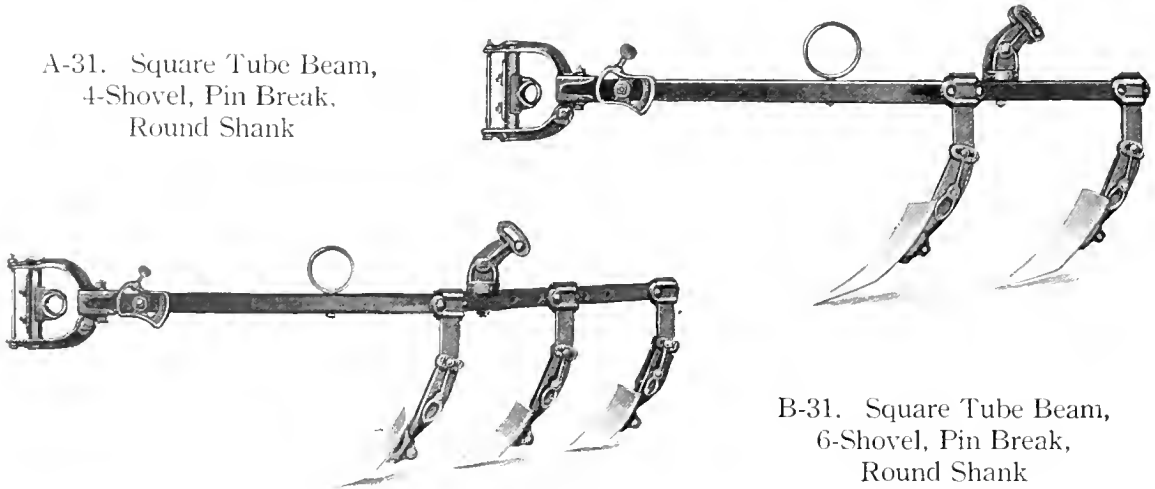
"A" before the number stands for four-shovel gangs.

"B" before the number stands for six-shovel gangs.

"C" before the number stands for eight-shovel gangs.

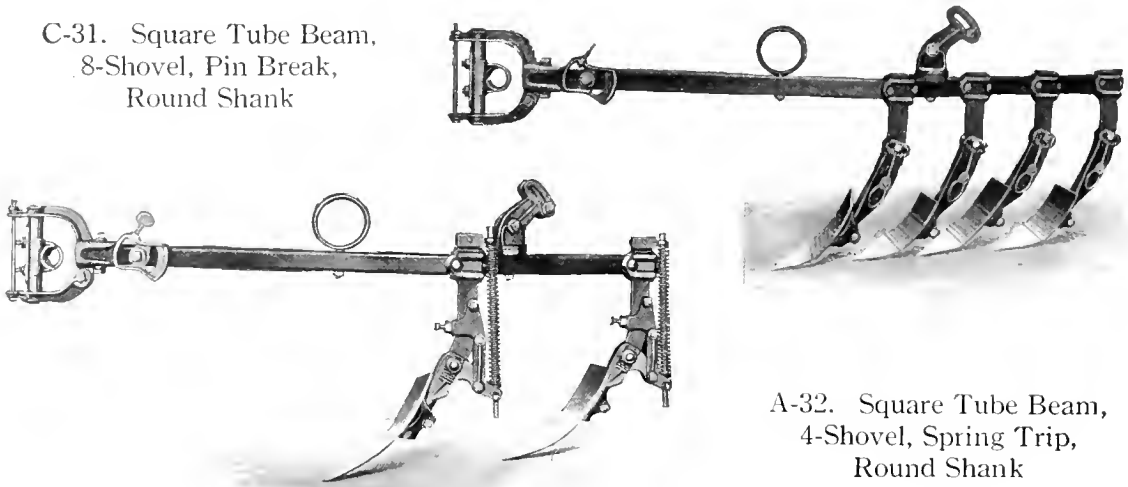
The first figure "3" indicates the equipment is for the No. 3 Walking Cultivator. The second number in each instance indicates the kind of equipment. For example—in A-31, the second figure indicates the equipment is round shank, pin break.

A-31. Square Tube Beam,
4-Shovel, Pin Break,
Round Shank



B-31. Square Tube Beam,
6-Shovel, Pin Break,
Round Shank

C-31. Square Tube Beam,
8-Shovel, Pin Break,
Round Shank

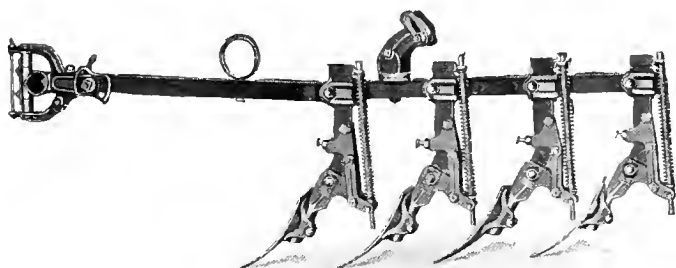
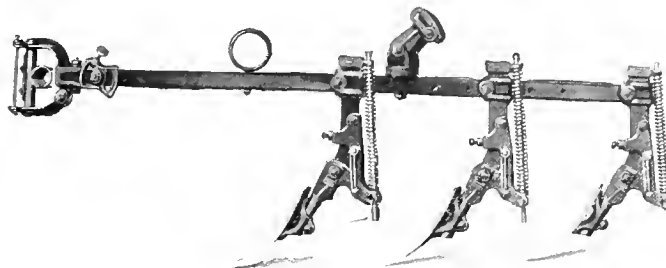


A-32. Square Tube Beam,
4-Shovel, Spring Trip,
Round Shank

INTERNATIONAL CULTIVATORS

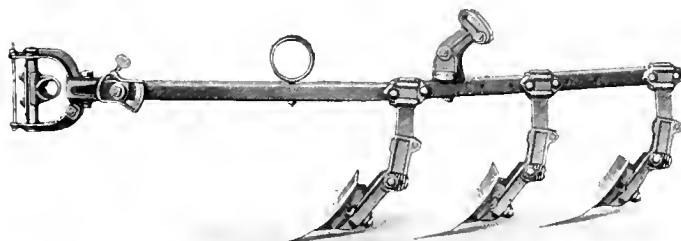
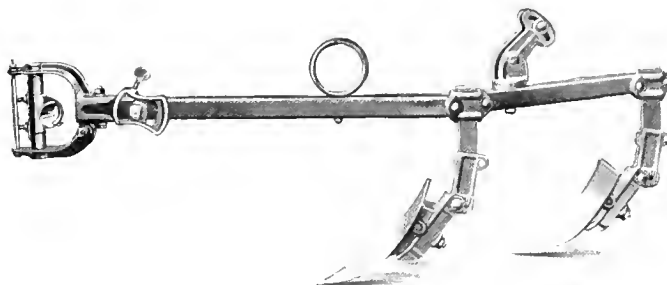
Gang Equipment for No. 3 Walking Cultivator

B-32. Square Tube Beam,
6-Shovel, Spring Trip,
Round Shank



C-32. Square Tube Beam,
8-Shovel, Spring Trip,
Round Shank

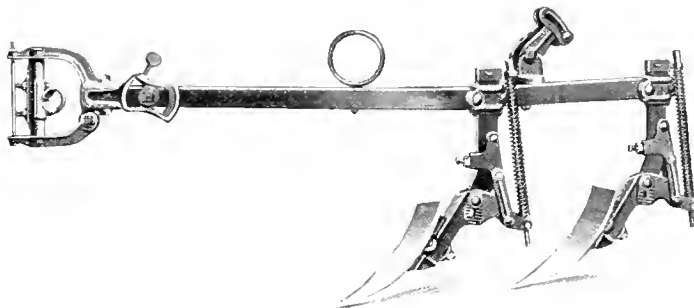
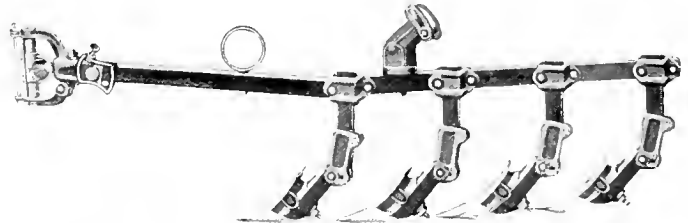
A-33. Square Tube Beam,
4-Shovel, Pin Break,
Heavy Slotted Shank



B-33. Square Tube Beam
6-Shovel, Pin Break,
Heavy Slotted Shank

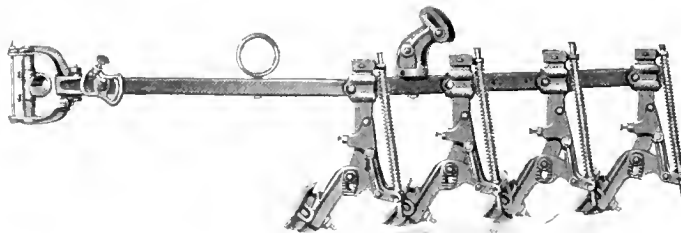
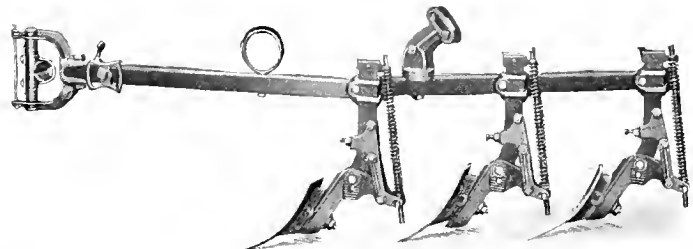
Gang Equipment for No. 3 Walking Cultivator

C-33. Square Tube Beam,
8-Shovel, Pin Break, Heavy
Slotted Shank



A-34. Square Tube Beam,
4-Shovel, Spring Trip, Heavy
Slotted Shank

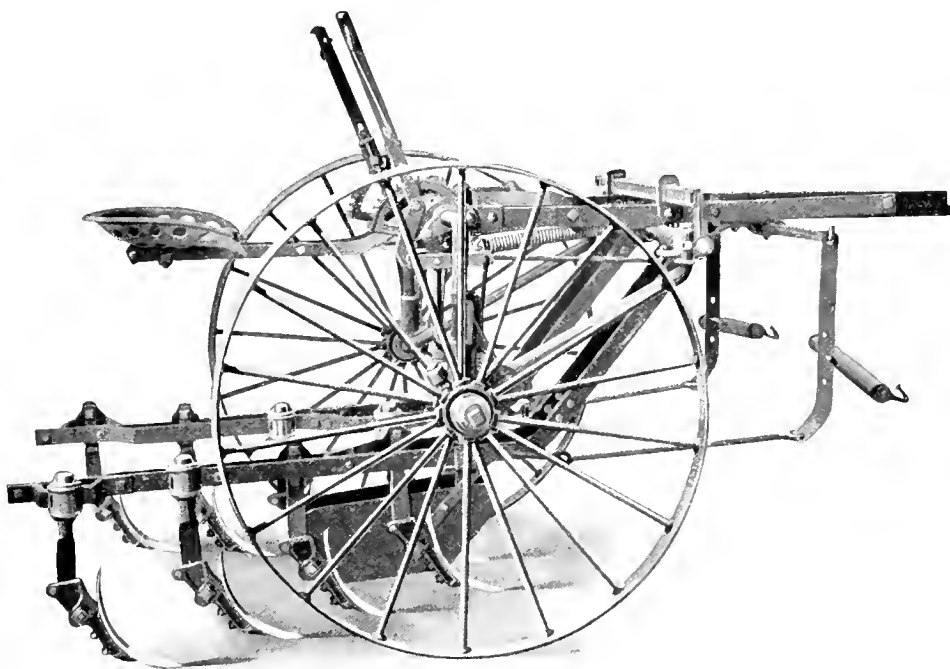
B-34. Square Tube Beam,
6-Shovel, Spring Trip, Heavy
Slotted Shank



C-34. Square Tube Beam,
8-Shovel, Spring Trip, Heavy
Slotted Shank

INTERNATIONAL CULTIVATORS

No. 4 International Pivot Axle Cultivator



The No. 4 International Pivot Axle Cultivator is well balanced and substantial. The cut shows it equipped with gangs C-45 Diagonal—8-shovel, pin break, slotted shank.

The No. 4 International pivot axle cultivator meets the varying cultivating conditions to be found throughout a large section of the country.

This cultivator is especially valuable for farmers in sections where hillsides are planted to crops. The telescoping axle, permitting several widths of tread, meets other requirements to be found on various classes of farms.

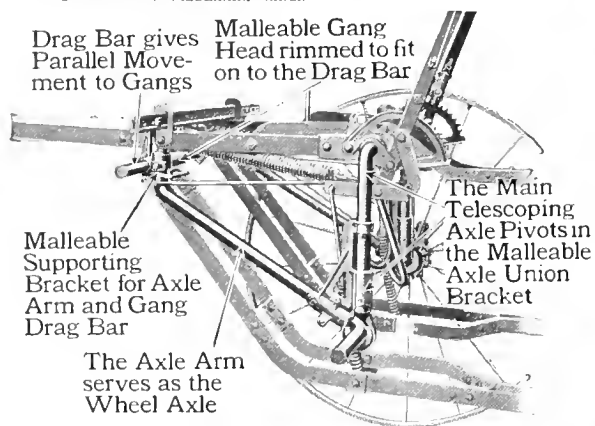
The strong steel gangs have several different adjustments of shovels, which make them adaptable to special crops, such as beans and garden truck, or to the regular field crops of corn. The gangs and standards are heavy, with plenty of clearance, and will do their work successfully in rough or uneven ground.

The Main Axle Is the Principal Frame Support of the cultivator. It telescopes and makes possible several tread widths adjustments. This axle extends into and pivots in the heavy malleable brackets which form the union for it and the forward axle arms at the hubs of the wheels.

The Axle Arms Form the Axles for the Wheels and extend forward to the malleable iron support brackets, as pointed out in the arrow cut on page 24 and through which the draw bar for the gangs extends.

Gangs Have a Parallel Movement They move together. They are controlled by the foot pedals by which the wheels are pivoted. The action is all one the wheels are pivoted and the gangs are moved at the same time. Dodging of irregular hills can be accomplished very quickly and easily. The side motion is extreme, with only a slight angle of the wheels. On this cultivator the gangs are not compelled to follow the wheels making the dodging of irregular hills very slow work—they move with the wheels.

INTERNATIONAL CULTIVATORS



Foot Pedals are connected to these malleable support brackets by rods. By pushing the pedals the wheels are pivoted, and at the same time the drag bar to which the gangs are attached is moved sideways, carrying the gangs with it and giving the parallel movement.

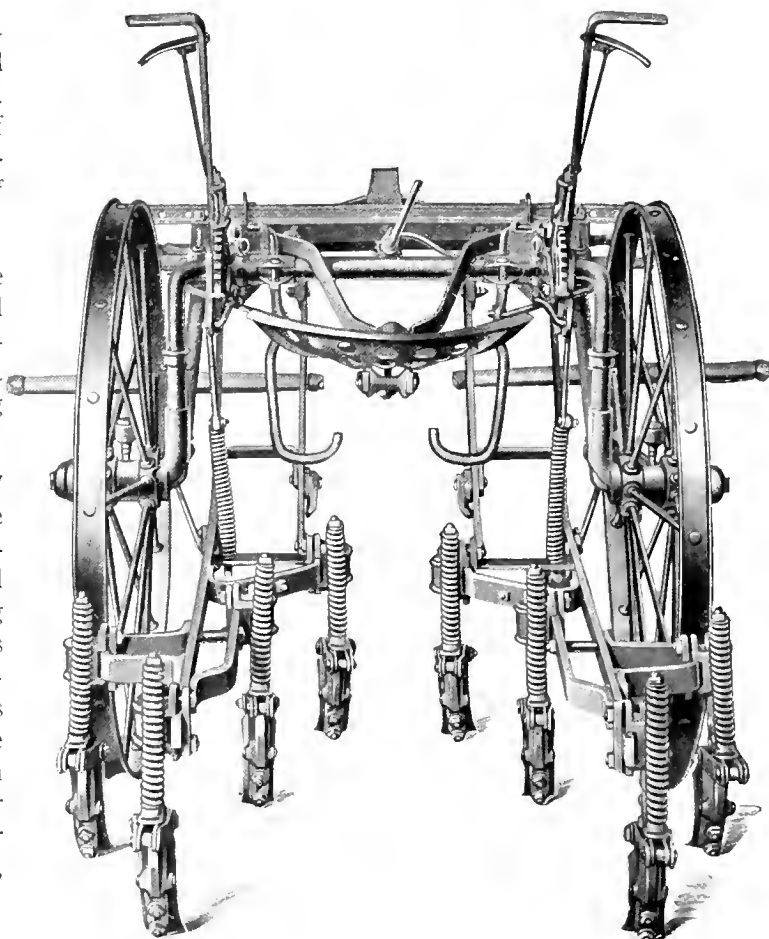
The **Drag Bar to Which the Gang Heads Are Attached** is made from cold drawn steel. The gang heads are malleable iron, and are about six inches long. They are rimmed, so that they slide easily on the drag bar. Since the gang bars are parallel

and bolted firmly into the malleable heads, the gangs are held rigid and side swing is prevented. The drag bar contains a series of bolt holes at either end to correspond with the adjustments of the telescoping axle.

The **Supporting Bar** for the gang drag bar is placed across and on top of the main frame immediately above the drag bar. It moves in harmony with the drag bar.

The Gangs Have a Variety of Shovel Arrangements There are 6 and 8-shovel gangs, disk attachments, moldboards, right and left hand square shovels, spring teeth, etc. On the 8-shovel gangs the shovels can be set in a diagonal arrangement and spaced so as to give good clearance between the shovels, or they can be set in a zigzag form so as to give a wider clearance between the shovels for working in ground full of grass, loose sods, or trash.

The Eagle Claw Arrangement of the Shovels is a third arrangement for the 8-shovel gangs.



The No. 4 adjusted for narrow tread. In this manner it is used for cultivating beans and other garden truck. The gang equipment consists of C-46 Eagle Claw—6-shovel, spring trip, slotted shank.

INTERNATIONAL CULTIVATORS

Bean rows are close together, and the shovels are so arranged that the front shovels, of course, work next to the row that is being straddled, and the second shovels cover the furrow of the first. The outside shovels are set to work outside of the wheels and next to the outside row, the rear shovels covering these. Two rows of beans are thus cultivated at a time, every other row being straddled in cultivating.

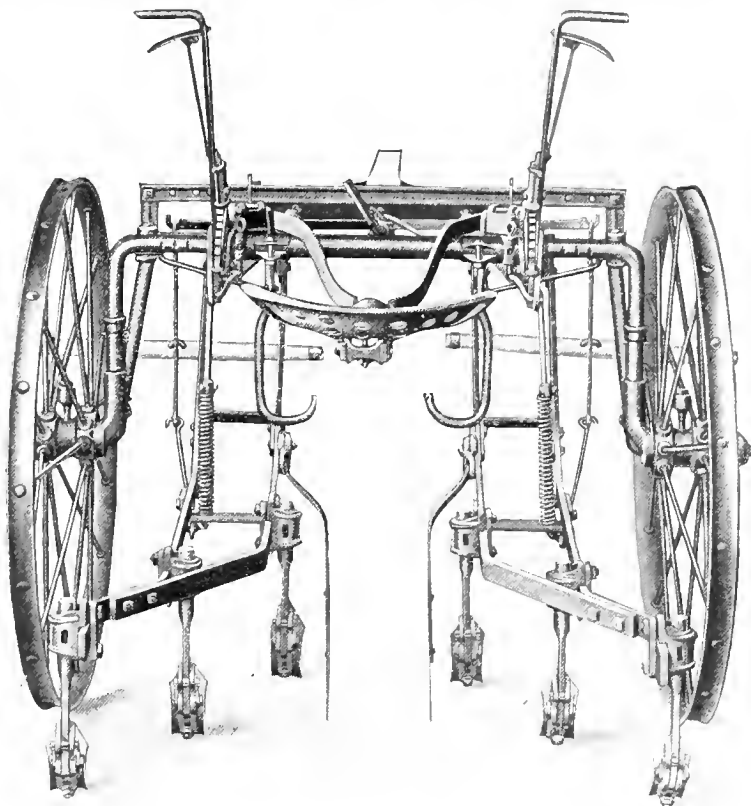
Heavy Malleable Iron Clamps hold the shovel standards firmly to the gang bars. Inside the clamp is a half circle block which clasps the standard, and as the steel clips and the heavy $\frac{7}{16}$ -inch steel bolts are tightened, the standards are held firmly to place.

The Wheels of the No. 4 International will stand up to the hardest kind of work. Hill-side cultivating, for which this cultivator is particularly adapted, is hard on wheels.

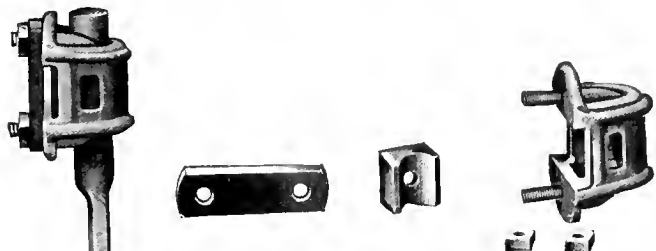
However, the wheels of this cultivator will last as long as any part of the cultivator, and that is saying a good deal. There are eighteen spokes $\frac{7}{16}$ of an inch in diameter and staggered. The spokes are upset and riveted into the malleable hub, and also are upset and riveted into the channel shaped steel rim. The hub is provided with a closely fitting sleeve. The sleeve is fitted with sand bands, making the bearing dust proof. Hard oil grease cups are placed in the center of the hubs between the spokes, and deliver the oil into the center of the hub. The wheel is held in place by a take-up washer and steel pin on the end of the

axle arm. A cap is screwed on to the end of the sleeve over this washer, which makes the hub of the wheel absolutely dust proof.

Springs Are Provided on the Gangs to carry the weight and make the handling of the gangs exceptionally easy. They are connected directly to the lifting levers.

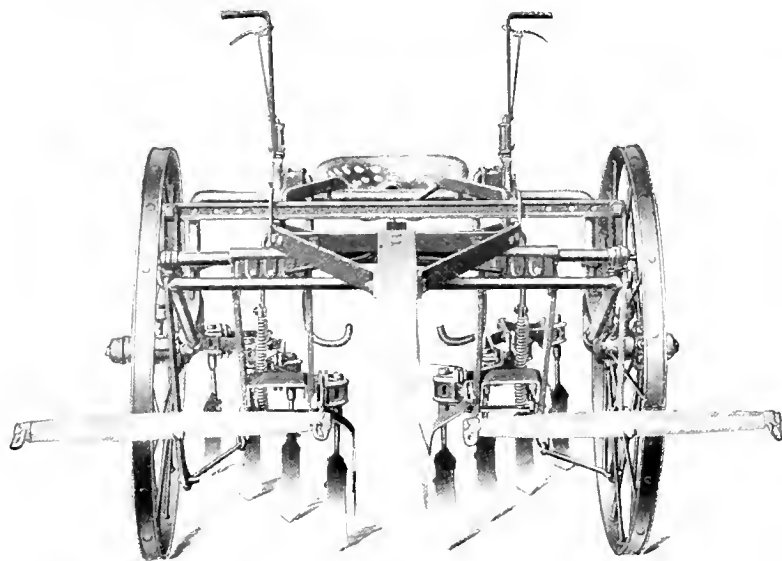


This cut shows the No. 4 adjusted for extreme width of tread. Note the high, wide arch, and the clear view the operator has of the road. It is equipped with gangs B-45—6-shovel, pin break, slotted shank.



The Malleable Clamps for attaching the standards to the gang bars are exceptionally heavy. The half circle blocks pinch down firmly on to the standards, holding them rigidly.

INTERNATIONAL CULTIVATORS



A front view of the No. 4, showing cultivator traveling straight and shovels working with full front.

Pressure Springs are also provided, and are attached to the rods by which the levers are connected to the gangs. These springs are used to force the shovels into the ground, and in baked, hard ground the springs keep the shovels working to their full depth.

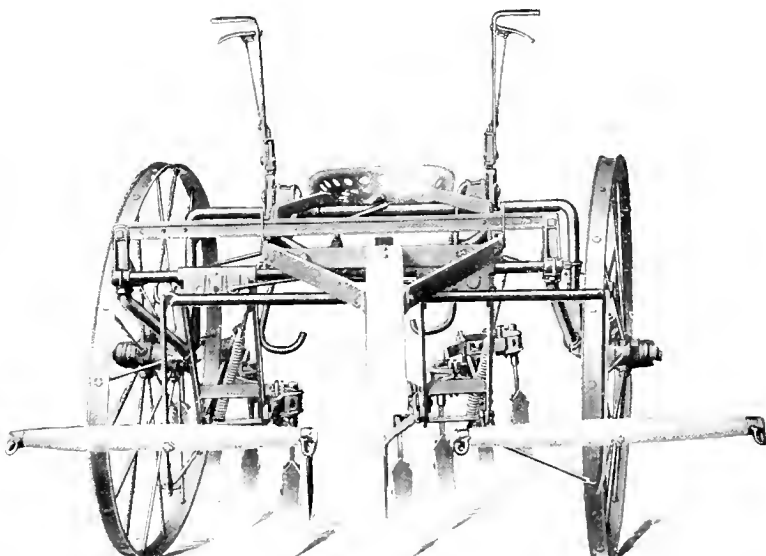
The Tongue on this Cultivator has three adjustments to suit the height of a small team, a medium sized team, or a large team. The adjustment requires the removing of only one bolt. It makes a satisfactory cultivator for a large number of users.

The Lever for Spreading the Gangs is in front of the operator and within easy reach. The leverage on the gangs is powerful, so that the act of spreading the gangs is quick and easy. The lever is set on an upward angle, and does not obstruct the operator's view of the road.

The Draft Is Directly to the Gangs The singletree hangers are connected directly to the outside gang bars by rods and chain links. They pull in a direct line with the gangs. This holds the shovels firmly to their work, and relieves the frame from considerable strain. The equalizing evener has a long movement, while the singletree rods to the gangs prevent one end of the evener flying clear back, and keeps the lagging horse off the cultivator.

Dirt Shields are regularly provided with the cultivator.

The Seat Is Adjustable up and down or backward and forward to suit the convenience of the operator.

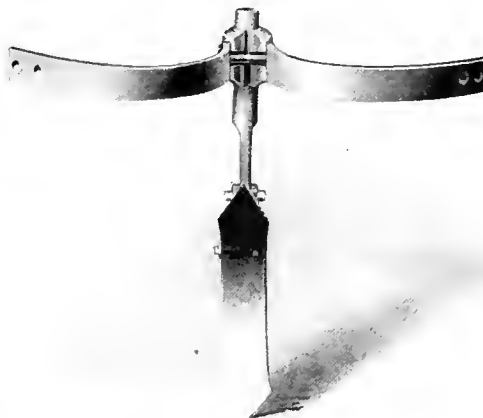


Another front view showing wheels pivoted. Notice how gangs have moved over, but shovels are still working with full front. This is due to the parallel movement of the gangs.

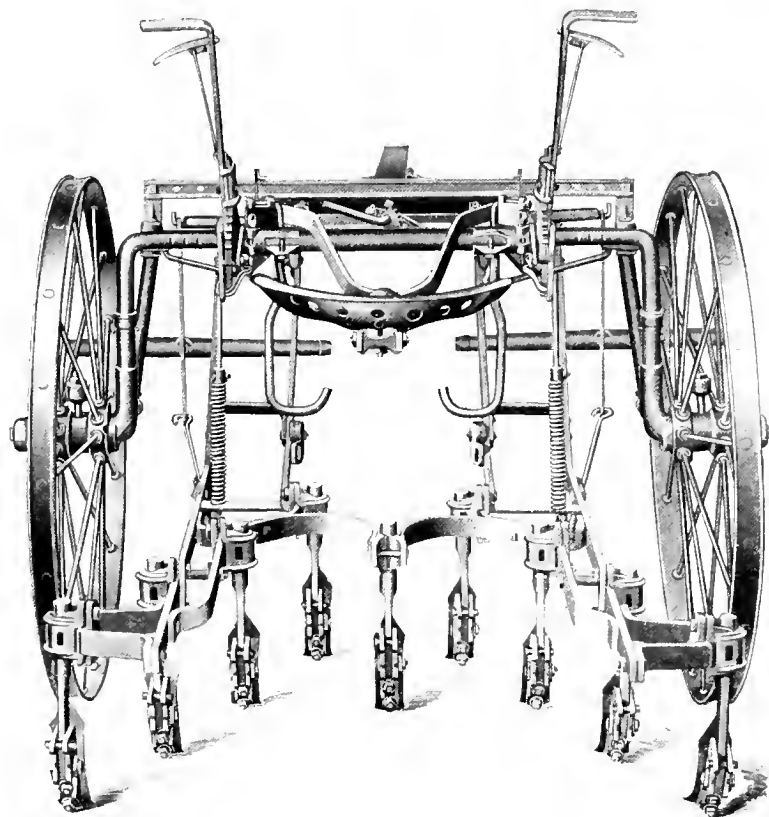
INTERNATIONAL CULTIVATORS

A Choice of Pin Break or Spring Trip Shanks may be had. The spring trip shank allows the shovel to tilt at an extreme angle, so that it will positively free itself from any solid obstruction it might catch. The spring is long and is on an adjustable rod. The spring trip construction is simple and positive in action.

The Pivot Axle Construction is such that when the rows are straight and the ground fairly level the cultivator will travel straight and hold to the row without guiding by the operator. This exceptional feature in a pivot axle cultivator is due to the pivot of the axle arm being forward of the



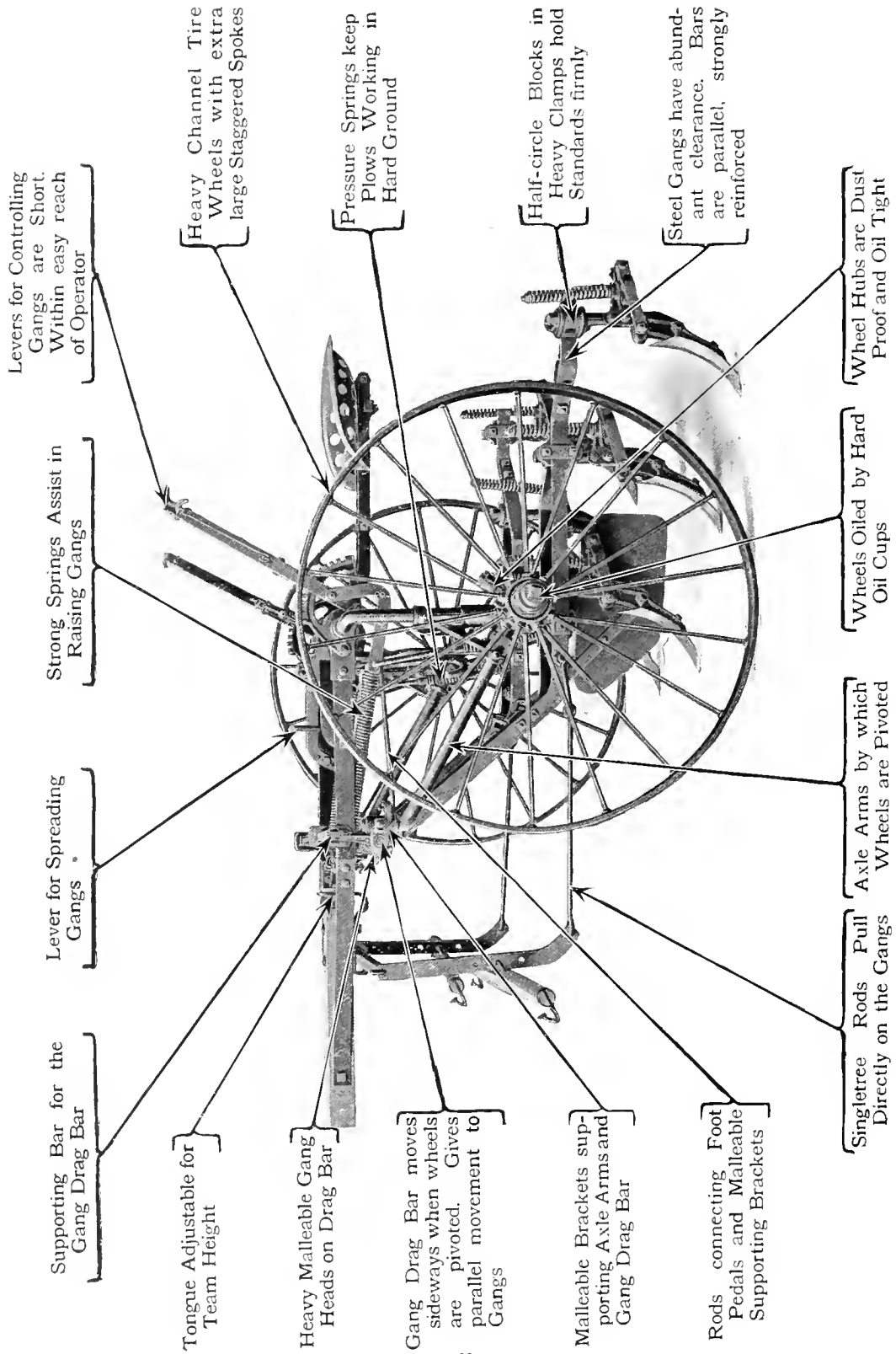
The Center Tooth or Center Shovel and Standard to be used in cultivator for harrowing



The No. 4 equipped with C-45 Diagonal-8-shovel, pin break, slotted shank gangs and Center Shovel. This is the way the cultivator appears when used for harrowing.

main axle and to the parallel operation of the gangs. Or when traveling on the road or to and from the field, the No. 4 International pivot axle cultivator holds itself in balance and does not require guiding, nor is it necessary to lock the wheels. In fact, the wheels will pass over large obstructions without affecting their alignment.

A Center Tooth or Shovel and Standard can be put onto the cultivator as the accompanying cut shows and the No. 4 Pivot Axle can then be used as a harrow. The shovels in the cut are arranged diagonally on the gang bars. With the center shovel in position, the ground is thoroughly stirred. The Pivot Axle construction, as mentioned in the paragraph above, makes this cultivator an exceptionally good one for harrowing.



Gang Equipment for No. 4 Pivot Axle Cultivator

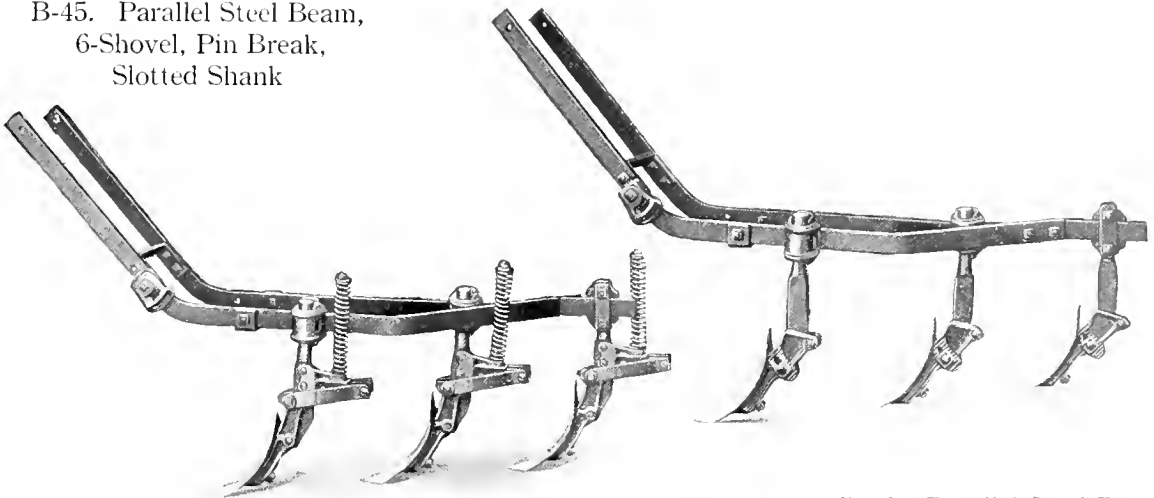
Key for Gang Equipment

"B" before the number stands for six-shovel gangs.

"C" before the number stands for eight-shovel gangs.

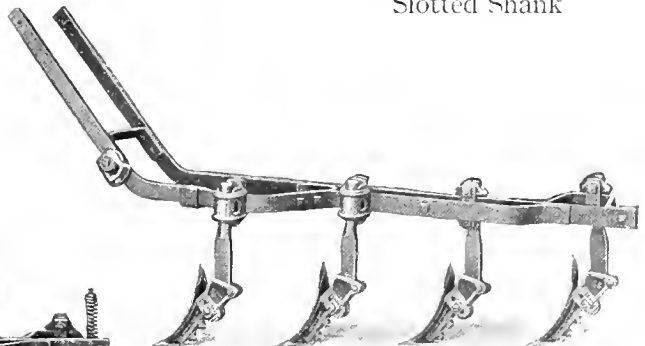
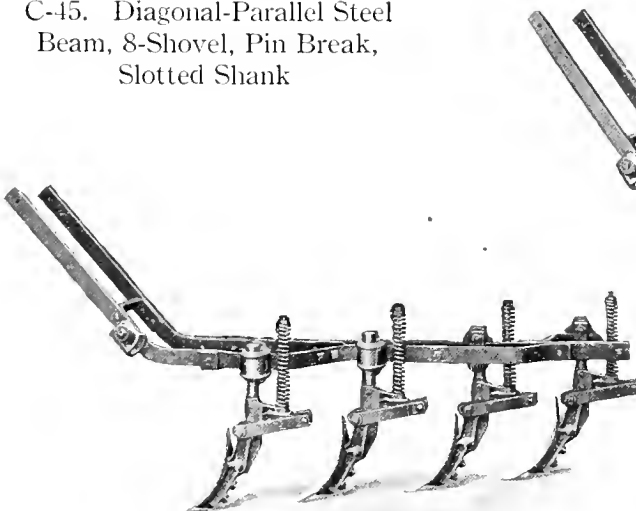
The first figure "1" indicates the equipment is for the No. 4 Pivot Axle Cultivator. The second number in each instance indicates the kind of equipment. For example, in B-45, the second figure indicates the equipment is pin break, slotted shank.

B-45. Parallel Steel Beam,
6-Shovel, Pin Break,
Slotted Shank



B-46. Parallel Steel Beam,
6-Shovel, Spring Trip,
Slotted Shank

C-45. Diagonal-Parallel Steel
Beam, 8-Shovel, Pin Break,
Slotted Shank

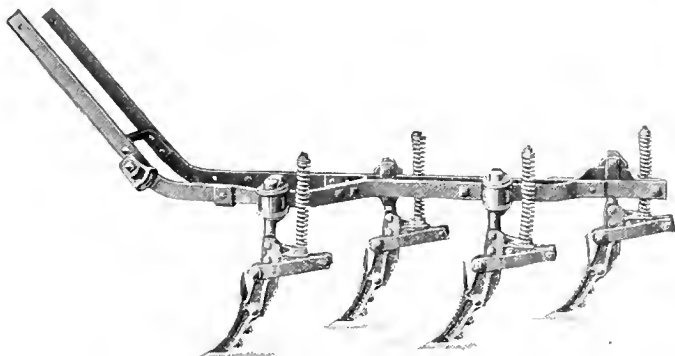
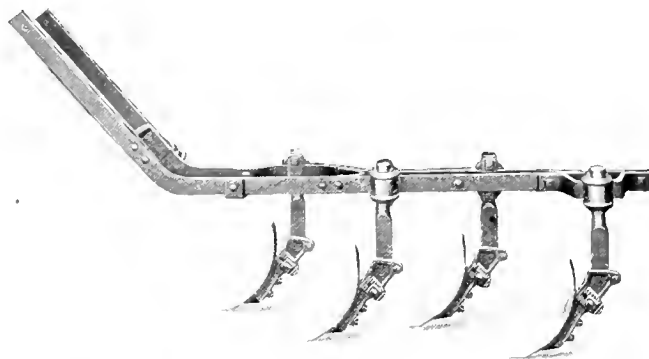


C-46. Diagonal-Parallel Steel
Beam, 8-Shovel, Spring Trip,
Slotted Shank

INTERNATIONAL CULTIVATORS

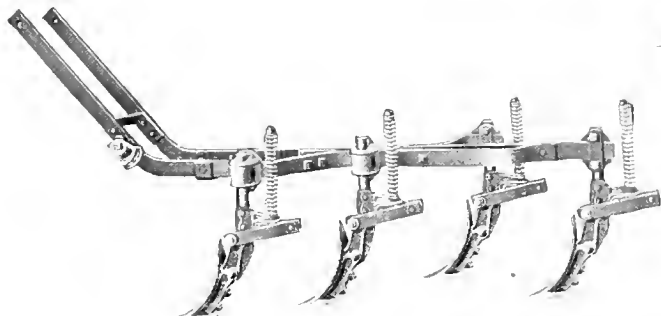
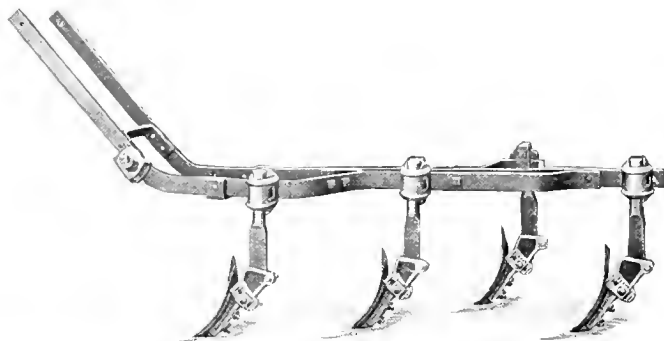
Gang Equipment for the No. 4 Pivot Axle Cultivator

C-45. Zigzag—Parallel Steel Beam, 8-Shovel, Pin Break, Slotted Shank



C-46. Zigzag—Parallel Steel Beam, 8-Shovel, Spring Trip, Slotted Shank

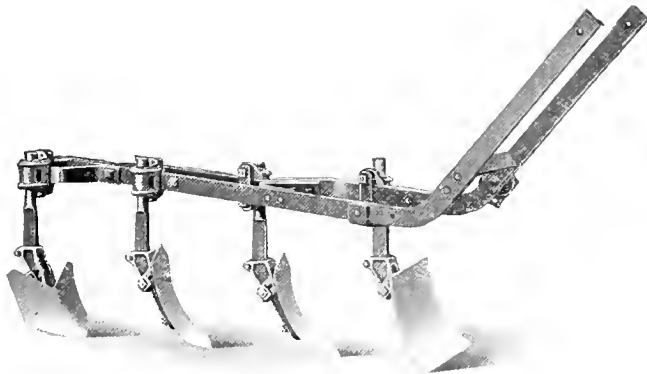
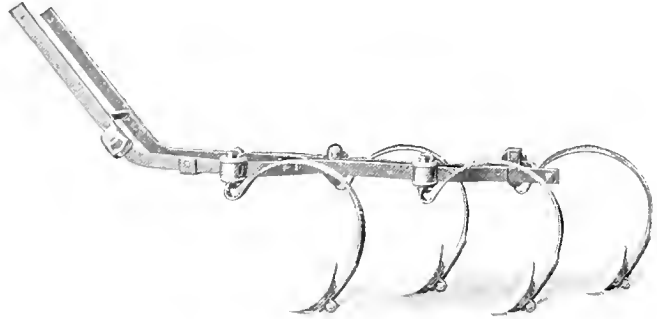
C-45. Eagle Claw—Parallel Steel Beam, 8-Shovel, Pin Break, Slotted Shank



C-46. Eagle Claw—Parallel Steel Beam, 8-Shovel, Spring Trip, Slotted Shank

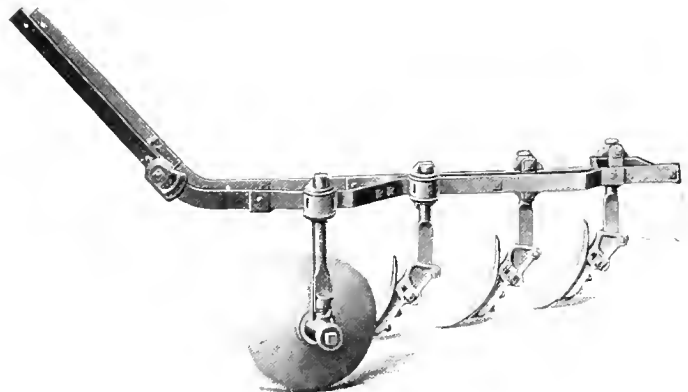
Gang Equipment for the No. 4 Pivot Axle Cultivator

C-47. Zigzag -Spring Teeth



C-45. Diagonal—8-Shovel, Pin Break, Slotted Shank, with Wing Hiller in Place of Front Shovel, and Horse Hoe in Place of Rear Shovel

C-45. Diagonal--8-Shovel, Parallel Steel Beam, Pin Break, Slotted Shank, with Disk in Place of Front Shovel





BINDERS, REAPERS
PUSH MACHINES



MOWERS



RAKES
TEDDERS



SIDE DELIVERY
RAKES



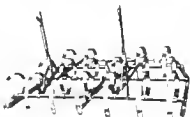
SWEEP RAKES,
STACKERS



DISK HARROWS



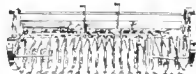
PEG TOOTH HARROWS



SPRING
TOOTH
HARROWS



CORN PLANTERS



GRAIN DRILLS



SEEDERS



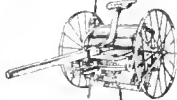
LIME & FERTILIZER SOWERS



CULTIVATORS



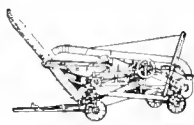
CORN
BINDERS



STALK CUTTERS



ENSILAGE CUTTERS



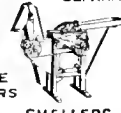
CORN SHREDDERS



CORN PICKERS



BINDER TWINE
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COUNCIL BLUFFS IA

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DES MOINES IA

DETROIT MICH

DUBUQUE IA

EAST ST LOUIS ILL

EAU CLAIRE WIS

ELMIRA N Y

EVANSVILLE, IND

FARGO, N D.

FT DODGE IA

FT WAYNE IND

GRAND FORKS N D.

GRAND RAPIDS MICH

GREEN BAY WIS

HARRISBURG PA

HELENA MONT

HUTCHINSON KAN

INDIANAPOLIS IND

JACKSON MICH

JACKSONVILLE FLA

KANKAKEE ILL

KANSAS CITY MO

KNOXVILLE, TENN

LANSING MICH

LINCOLN NEB

LITTLE ROCK ARK

MADISON WIS

MANKATO MINN

MASON CITY IA

MEMPHIS TENN

MILWAUKEE WIS

MINNEAPOLIS MINN

MINOT N D

NASHVILLE TENN

NEW ALBANY IND

NEW ORLEANS LA

OGDENSBURG N Y

OKLAHOMA CITY OKLA

OMAHA, NEB

PARKERSBURG, W VA

PARSONS KAN

PEORIA ILL

PHILADELPHIA PA

PITTSBURGH PA

PORTLAND, ORE

QUINCY ILL

RICHMOND IND

RICHMOND VA

ROCKFORD, ILL

ST CLOUD, MINN

ST JOSEPH MO

ST LOUIS, MO

SAGINAW MICH

SALINA KAN

SALT LAKE CITY UTAH

SAN FRANCISCO CAL

SIoux CITY IA

SIoux FALLS S D

SOUTH BEND IND

SPOKANE, WASH

SPRINGFIELD ILL

SPRINGFIELD MO

TERRE HAUTE, IND

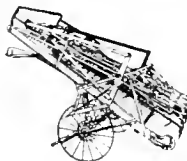
TOLEDO OHIO

TOPEKA KAN

WATERTOWN S D

WICHITA KAN

WINONA, MINN



HAY LOADERS



HAY PRESSES



THRESHERS



OIL TRACTORS



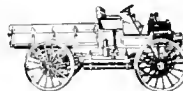
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FARM WAGONS



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